



## **RECENT IDEAS ON ECONOMICS, FINANCE AND BUSINESS**

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## Labour Discrimination Related to Pregnancy and Motherhood in Croatia

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### Abstract

In 2012, Croatian Office for Gender Equality published report on position of pregnant workers and working mothers on the national labour market. Survey results clearly demonstrated concerning situation in the labour market where every second pregnant woman was dismissed due to pregnancy. The remaining 50% of pregnant workers and working mothers faced denial of one or more labour rights due to pregnancy or childcare. Apart from violation of basic human rights in the labour market, pregnant workers and working mothers faced discriminatory practices in financial sector i.e. denial of right to take bank loans. These practices are contrary to current Croatian labour and gender equality legislation, as well as European and international legal standards related to protection of pregnant workers and working mothers. Nonetheless, due to high national unemployment rate, women faced with labour discrimination rarely use available legal remedies. This paper analysis legal framework applicable to labour discrimination of pregnant workers and working mothers, primarily through the lens of applicable European *acquis communautaire* i.e. Directives. It also investigates case law of Croatian courts and the European Court of Justice related to labour discrimination of pregnant workers and working mothers. More specifically, research explores convergences and divergences of national and European case law. The aim of the paper is to contribute to academic discussions on the labour market gender equality and measures necessary to achieve full respect of all national and international legal standards.

**Keywords:** discrimination, pregnant workers, working mothers, gender equality.

### 1.1. Introduction

International legal protection of pregnancy and motherhood is rooted in fundamental human rights instruments such as Convention of the Rights of Child (further: CRC) and the Convention on Elimination of All Forms of Discrimination against Women (further: CEDAW). CRC in Article 24 d requires State Parties to ensure appropriate pre-natal and post-natal health care for mothers and the Convention on Elimination of All Forms of Discrimination Against Women (further; CEDAW) which in Article 12.2. requires State Parties to ensure all appropriate services in connection with pregnancy, confinement and the post-natal period. Later Convention expanded need to provide particular legal protection to pregnant workers through the stipulation of Article 11.2 concerning prevention of discrimination of women on grounds of maternity. Convention has obliged State Parties to “take appropriate measures to prohibit, subject to the imposition of sanctions, dismissal on the grounds of pregnancy or of maternity leave and discrimination in dismissals on the basis of marital status and to introduce maternity leave with pay or with comparable social benefits without loss of former employment, seniority or social allowances” (CEDAW, 1979). CEDAW initially required State Parties to introduce “special protection to women during pregnancy in types of work proved to be harmful to them” but this provision has later been subject to alterations in national legislations under the evolving body of gender equality law and has moved from absolute prohibition to introduction of measures of protection. Revised European Social Charter from 1996 followed human rights standards and provided special protection to pregnant workers in Art. 8, including regulation of maternity leave, night work and breastfeeding break, stipulation on unlawfulness of dismissal during pregnancy and protection of pregnant workers or new mothers from

dangerous, unhealthy and arduous work. Finally, the Charter on Fundamental Rights has followed the same principles of prohibition of dismissal related to maternity (Art. 33.2 of the Charter).

As women were entering labour markets in larger numbers, protection of pregnancy and motherhood has advanced from human rights legal framework to labour law framework. In recent decades, we witnessed development of impressive legislative efforts at the international, regional and national levels aimed at providing protection against discrimination related to pregnancy and motherhood in the workplace. In that regard, European Union has been the most instrumental and active in legislating improvements of safety and health of pregnant women and recent mothers at work. Along with normative activities, European Court of Justice has supported prohibition of discrimination on the basis of pregnancy or motherhood at work, including prohibition of dismissal based on pregnancy, which they considered as direct sex discrimination (Grgurev, Ceronja, 2011). Lately, European Union has embarked on new round of negotiations with trade unions and employers on a new package of rights aimed at providing even stronger legal protection from dismissal for new mothers. Such progress did lead to improved national regulatory framework and case law in many of the European Union countries, but not all. Croatia as the last European Union member still struggles with a need to ensure effective implementation of international and regional legal instruments and its own national gender equality and labour laws related to the protection of pregnancy and motherhood. This paper will try to shed a light on the most pressing legal issues related to the violations of international legal standards of labour protection of pregnancy and motherhood in the context of extremely high number of dismissals of pregnant workers on the Croatia labour market that was noted in 2012 Gender Equality Report of Croatian Ombudsperson for Gender Equality (Annual Report 2012). In order to analyse the problem, we will look into the European *acquis communautaire* in the area of protection of pregnancy and motherhood at work, case law of the European Court of Justice and national regulation, primarily through the lens of labour law, but also through the lens of gender equality law, anti-discrimination law and constitutional law.

## 1.2. European Legal Framework Applicable to Protection of Pregnancy and Motherhood

European Union has tackled issue of protection of pregnant workers and new mothers in several key Directives. Chronologically, the first important legal instrument for female workers was adoption of *Directive 79/7 of 19 December 1978 on the progressive implementation of the principle of equal treatment for men and women in matters of social security*, followed by *Council Directive 86/613/EEC of 11 December 1986 on the application of the principle of equal treatment between men and women engaged in an activity, including agriculture, in a self-employed capacity, and on the protection of self-employed women during pregnancy and motherhood*.

Further on, Union has adopted *Directive 92/85/EC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding*. Later on, Union Member States have adopted the *Directive 2000/78/EC4 on establishing a general framework for equal treatment in employment and occupation*, and *Directive 2002/73/EC5 on amending Directive 76/207/EEC on the principle of equal treatment*. Union realized new legal challenges in regulation of equal opportunities and equal treatment of men and women in employment and has adopted recast of *Directive 2006/54 of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation*. In matters of parental leave, particular importance has *Directive 2010/18 of 8 March 2010 implementing the revised Framework Agreement on parental leave concluded by BUSINESSEUROPE, UEAPME, CEEP and ETUC and repealing Directive of 3 June 1996*. Due to changes of contemporary employment trends and newly identified legal challenges applicable to self-employed workers, in 2010 Member States agreed to repeal *Directive of 11 December 1986* and adopt new and modern *Directive 2010/41 of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity*.

In the context of this paper and research of legal norms that are relevant to analyze the topic of legal protection of pregnancy and motherhood and prohibition of labor discrimination and dismissal based on pregnancy and motherhood, it is necessary to go into the more details of one particular Directive, which is *Directive 92/85/EC prohibiting dismissal of pregnant workers*. Directive has explicitly acknowledged that pregnant workers, workers who have recently given birth and breastfeeding mothers at work are group of specific risk. Furthermore, preamble of Directive explains possible harmful consequences of dismissal due to pregnancy or motherhood to the physical and mental state of pregnant workers, workers who have recently given birth or who are breastfeeding. Therefore, EU legislator rendered it justified to lay down absolute prohibition of dismissal of pregnant workers and new mothers.

Two key provisions relevant for our research are provisions of Article 10 about prohibition of dismissal and Article 12 on defense of rights. Directive stipulates obligation of a Member State to regulate absolute prohibition of dismissal of pregnant workers from the beginning of pregnancy to the end of the maternity leave, unless justified by public interest, duly substantiated grounds for dismissal or under the consent of the competent authority. Directive also stipulates obligation of a Member State to protect worker from unlawful dismissals in breach of the provisions of this Directive and national legislation. Second provisions is even more important for our discourse as it is provision on duty of Member States to “introduce into their national legal systems such measures as are necessary to enable all workers who should themselves wronged by failure to comply with the obligations arising from this Directive to pursue their claims by judicial process (and/or, in accordance with national laws and/or practices) by recourse to other competent authorities.” (Directive 92/85/EC, Art. 12).

In line with above mentioned international and European legal framework, the case law of the European Court of Justice has been very instrumental in reinforcing that labor discrimination related to pregnancy and motherhood is proclaimed unlawful and in violation of the EU Directives. The EU Court has thus considered dismissal or any discriminatory practice against pregnant woman or mother as straightforward cases of sex discrimination (Cases C-177/88 *Dekker v Stichting Vormingscentrum voor Jonge Volwassenen Plus* [1990] ECR I-3941; C-179/88 *Handels- og Kontorfunktionærernes Forbund I Danmark (Hertz) v Dansk Arbejdsgiverforening* [1990] ECR I-3979; C-32/93 *Webb v EMO Air Cargo* [1994] ECR I-3567, C-421/92 *Habermann-Beltermann v Arbeiterwohlfart* [1994] ECR I-1657).

In Paquay case, the Court has moved the standard of protection from dismissal for pregnant women or new mothers even further deciding that protection “must be interpreted as prohibiting not only the notification of a decision to dismiss on the grounds of pregnancy and/or of the birth of a child during the period of protection set down in paragraph 1 of that article (of Directive 92/85/EC) but also the taking of preparatory steps for such a decision, such as searching for and finding a permanent replacement for the relevant employee, before the end of that period.” (C-460/06 *Paquay v Societe d'architectes Hoet and Minne SPRL* [2007] ECR I-8511). Such position of the European Court is crucial as it extended meaning of Directive's provision referring to the protected period from beginning of pregnancy until the end of maternity leave. Therefore, national courts should carefully examine whether the employer has commenced search for a replacement employee during the protected period, as well as immediately after the return to work of a new mother and if this was the case, dismissal should be declared unlawful.

On the matter of Art. 12 of Directive 92/85/EC referring to provision of effective judicial protection in cases of dismissal on grounds of pregnancy and motherhood, the EU Court has brought important decision in Case C-63/08 *Virginie Pontin v T-Comalux (SA)* [2009] ECR I-10467). In this case, the Court declared discriminatory to set particularly short limitation period (in this case, of 15 days, shortened by post delivery of written dismissal notice) to have a legal remedy available in order to assert rights following dismissal of a pregnant worker. Court considered that this limitation period “rendered practically impossible the exercise of rights conferred by Community law.” Subsequently, the Court considered the standard of effectiveness of judicial remedy in light of particular circumstances related to pregnancy and inability to prepare the legal case and seek legal aid within unreasonably short limitation period.

### 1.3. Croatian Legal Framework and Case Law Related to Pregnancy and Motherhood at Work

Croatian Constitution (Official Gazette No 56/90, 135/97, 8/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14) explicitly protects maternity in general and motherhood in relation to workplace in articles 62. and 64. Directive 92/85/EC has been implemented into Croatian legislation through provisions of three laws: Labor Law (Official Gazette No 93/14), Law on Occupational Safety at Work (Official Gazette No 71/14, 118/14, 154/14) and Law on Pregnancy and Parental Allowances (Official Gazette No 85/08, 110/08, 34/11, 54/13, 152/14). In this paper, we will focus on provisions of the Labour Law because it has been the main source of legal protection of pregnant workers and new mothers from dismissal and unfavorable treatment at work. Croatian regulation of protection of workers based on pregnancy and motherhood or fatherhood refers to absolute prohibition of dismissal during pregnancy, maternity, paternity or adoption leave, part-time work, work with reduced working hours due to increased care for a child, leave of absence of a pregnant woman or breastfeeding mother, leave of absence or work with reduced working hours due to care for a child with developmental disabilities, and during 15 days after termination of a pregnancy or any of those rights (Art. 34.2 of the Labour Law). Dismissal is null and void if employer knew about pregnancy or parenthood or if worker proves it by certified medical record within 15 days following dismissal (Art. 34.3.). Only legally justified exceptions to this prohibition are death of employer who is a natural person, closure of a craft and liquidation of the company. In all of these cases, employment contract is

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terminated regardless of statutory provisions. Violation of absolute prohibition of dismissal by employer is considered as the most severe violation of labour law and fined by the maximum fine as stipulated by the article 229.9 of the Labour Law.

According to the Croatian Labour Law, all labour disputes should firstly be referred to the employer who has limitation period of 15 days to respond. If employer fails to deal with the request for protection of right or fails to reinstate the right, worker has further limitation period of 15 days to refer the matter to the court as per Art. 133 of the Labour Law.

In addition to labour legislation, Croatia also has very elaborate laws on prevention of discrimination and gender equality, as well as fully functional mechanisms of protection of human rights through institutions of Ombudsperson and specialized Ombudsperson for Gender Equality.

National Supreme Court has ruled that absolute prohibition of dismissal for pregnant and new mothers means that decision on dismissal could not be legally enforced as long as worker is using his pregnancy or parental right, regardless of the fact that termination of work would be enforced after cessation of pregnancy or parental right (Supreme Court of Croatia Rev 1805/01 of 1.10. 2002).

If we look into the statutory provisions of applicable national laws, we could conclude that pregnant workers and new mothers in Croatia do enjoy sufficient level of protection from dismissal or discrimination at work based on pregnancy or motherhood. Formally, this is certainly well regulated area of labour and gender equality law. It is also harmonized with the relevant provisions of the EU law Directives, primarily Directive 92/85/EC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding. In reality, Annual Report for 2012 of Croatian Ombudsperson for Gender Equality disclosed results of one-of-a-kind survey according to which every second pregnant woman in Croatia was dismissed due to pregnancy. The remaining 50% of pregnant workers and working mothers faced denial of one or more labour rights due to pregnancy or childcare. Apart from violation of basic human rights in the labour market, pregnant workers and working mothers faced discriminatory practices in financial sector i.e. denial of right to take bank loans. These concerning practices were not subsequently followed up by relevant state authorities demonstrate deeply rooted issues closely linked to discrimination and gender inequality. In those circumstances, it would be expected that number of labour disputes raises, but actually, according to the data of trade unions, number of national labour disputes is constantly decreasing. Reasons for that can be found in domestic unemployment rate being currently at 15%, with female unemployment of well above 22% and numerous other factors limiting internal labour mobility of all categories of workers, and particularly pregnant workers and new mothers. Legal provisions on protection of pregnancy and motherhood have a very little impact unless workers can seek redress at labour tribunals, as it is stipulated in Directive 92/85/EC on effective judicial protection. In Croatian context, effective judicial protection means very limited, if any, options to use free legal based on income and lengthy and complicated procedure of approval. Having in mind short limitation periods of 15+15 days to seek judicial redress for unlawful dismissal, in practice free legal aid could probably not be activated so quickly due to legal constraints related to requirements to use free legal aid. Thus, pregnant women and new mothers faced with unlawful dismissal during pregnancy or parental leave are expected to expose themselves to search for a legal representative, preparation of a case for the court, additional costs during pregnancy or motherhood and complicated court procedures. On the other side, Croatian courts are still in favour of awarding relatively small amounts of labour-dispute compensations. Plaintiffs are also faced with great uncertainty of reinstatement of labour relation, specially if labour relation was between a worker and a private employer.

Due to numerous obstacles to effective judicial recourse in cases of labour discrimination of pregnant workers and new mothers and weakening of trade unions, specially in private sector where they became virtually non-existent, the best solution would be to expand mandate of one of the existing gender or anti-discrimination bodies to be able to legally represent pregnant workers and new mothers in all cases of unlawful dismissal due to pregnancy or motherhood. In this way, women who become victims of sex discrimination at work related to their reproductive rights would deal with a very simple redress procedure and would use expert assistance at no cost. Having in mind importance of ensuring full protection of all reproductive rights at all stages – particularly during employment – it is justified to shift a burden of labour dispute recourse from pregnant workers and new mothers to specialized, fully staffed state funded, but independent body.

#### 1.4. Conclusion

Labor protection of pregnancy and motherhood is one of the corner stones of anti-discrimination law and gender equality. Having in mind that only female workers encounter pregnancy related work discrimination and could face unlawful dismissal due to the fact that employers consider them as financial burden during their absence from work, legislators have to be particularly vigilant on legal regulation of protection of pregnancy and parental rights at work. Leveling labor related sex discrimination of pregnant workers and new mothers to other forms of labor discrimination is unfair and fails to acknowledge special vulnerability of pregnant workers and new mothers. The mere notion of absolute prohibition of dismissal during pregnancy and new motherhood at the European level was adopted with the intention to protect women during reproductive absences from adverse consequences of their fundamental human right to procreate to their employment relation. Normative protection has very little impact unless it has meaningful judicial remedy available for violation of that protection. In last several years, exceptionally high number of pregnant workers in Croatia is dismissed because of their pregnancies, and it seems all those pregnant workers are unable and unwilling to engage in traditional labor dispute. In order to fully implement international human rights standards and European legislation in the area of protection of pregnant workers and new mothers, access to judicial recourse should be reconsidered and modeled in a way that allows easier access to labor tribunals. This can be done through amendments of labor legislation that would allow involvement of state bodies for gender equality or anti-discrimination bodies, so that victims of sex discrimination based on pregnancy or motherhood would be able to fully realize their fundamental human rights and their labor rights.

#### References

- [1] European Network of Legal Experts in the Field of Gender Equality (2012). Fighting Discrimination on the Grounds of Pregnancy, Maternity and Parenthood, The application of EU and national law in practice in 33 European countries. Available from: [http://ec.europa.eu/justice/gender-equality/files/your\\_rights/discrimination\\_pregnancy\\_maternity\\_parenthood\\_final\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/your_rights/discrimination_pregnancy_maternity_parenthood_final_en.pdf)
- [2] Grgurev, I., Ceronja, P. (2011). Opoziv imenovanja trudne članice uprave društva kapitala – spolna diskriminacija? Zbornik PFZ, 61, (6) 1881-1919 (2011).
- [3] Pravobraniteljica za ravnopravnost spolova, Godišnje izvješće o radu za 2012 godinu. Available from: <http://www.prs.hr/index.php/izvjesca/2012>
- [4] Case Law
- [5] C-177/88 *Dekker v Stichting Vormingscentrum voor Jonge Volwassenen Plus* [1990] ECR I-3941.
- [6] C-179/88 *Handels- og Kontorfunktionærernes Forbund I Danmark (Hertz) v Dansk Arbejdsgiverforening* [1990] ECR I-3979.
- [7] C-32/93 *Webb v EMO Air Cargo* [1994] ECR I-3567.
- [8] C-421/92 *Habermann-Beltermann v Arbeiterwohlfart* [1994] ECR I-1657.
- [9] C-460/06 *Paquay v Societe d'architectes Hoet and Minne SPRL* [2007] ECR I-8511.
- [10] C-63/08 *Virginie Pontin v T-Comalux SA* [2009] ECR I-10467.
- [11] Supreme Court of Croatia Rev 1805/01 of 1.10. 2002.
- [12] Directives, laws and Constitution
- [13] *Directive 79/7 of 19 December 1978 on the progressive implementation of the principle of equal treatment for men and women in matters of social security* (OJ L 6, 10.1.1979, p. 24–25).
- [14] *Directive 86/613/EEC of 11 December 1986 on the application of the principle of equal treatment between men and women engaged in an activity, including agriculture, in a self-employed capacity, and on the protection of self-employed women during pregnancy and motherhood* (OJ L 180, 15.7.2010, p. 1–6)
- [15] *Directive 92/85/EC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding* (OJ L 348/1, 28/11/1992).
- [16] *Directive 2000/78/EC on establishing a general framework for equal treatment in employment and occupation*, (OJ L 303, 02/12/2000 P. 0016 – 0022).
- [17] *Directive 2002/73/EC on amending Council Directive 76/207/EEC on the principle of equal treatment*. (OJ L 269, 5.10.2002, p. 15–20).
- [18] *Directive 2006/54 of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation*. (OJ L 204, 26.7.2006, p. 23–36).

- [19] *Directive 2010/18 of 8 March 2010 implementing the revised Framework Agreement on parental leave concluded by BUSINESSEUROPE, UEAPME, CEEP and ETUC and repealing Directive of 3 June 1996.* (OJ L 68, 18.3.2010, p. 13–20).
- [20] *Directive 2010/41 of 7 July 2010 on the application of the principle of equal treatment between men and women engaged in an activity in a self-employed capacity.* (OJ L 180, 15.7.2010, p. 1–6).
- [21] Constitution of Republic of Croatia (Official Gazette No 56/90, 135/97, 8/98, 113/00, 124/00, 28/01, 41/01, 55/01, 76/10, 85/10, 05/14).
- [22] Labor Law (Official Gazette No 93/14).
- [23] Law on Occupational Safety at Work (Official Gazette No 71/14, 118/14, 154/14).
- [24] Law on Pregnancy and Parental Allowances (Official Gazette No 85/08, 110/08, 34/11, 54/13, 152/14).

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## Strategic Management of Small Enterprises in Commune of Peja

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### Abstract

This research is realized in city of Peja, a city in the western part of Republic of Kosovo. In this research are included 40 small enterprises (27 in the center of the city and 13 in the periphery). From them 37 enterprises were established from familiar-individual capital, whereas only three enterprises were corporations. This research is led from two correlation hypotheses. The first hypothesis of this research is: "Strategic management has a positive relation with the empowering of the short-term and long-term objectives of the small enterprises", is made correlative analysis and we have the statistical production [ $r = .502^{**}$ ,  $p < .001$ ], which supports the first hypothesis. Thus a genuine strategic management affects in the empowering and the reflection of the short-term and long-term objectives of small enterprises. The second hypothesis of this research was: "Business strategy affects in the rise of financial indicators", is made the correlative analysis and we have this statistical production [ $r = -.220$ ,  $p < .172$ , a result that is not significant and it does not support the second hypothesis of this research.

**Keywords:** Strategic, Management, Small, Enterprises, Commune, Peja

### Introduction

The idea and the concept of this research was to see if there is a positive relation of strategic management with short-term and long-term objectives of the small enterprises and to see if the business strategy affects the raise of financial indicators. In the analyzed part of literature is cited for the management and especially for the strategic management. After raising of hypothesis and realization of the research methodology is concluded that strategic management is interrelated with the empowering of short-term and long-term objectives in the enterprise whereas the results of this research it did not result that business strategy affects in the raising of the financial indicators.

### Literature Reviews

The word management derives from the word "to manage". In some languages for ex. French, Swedish, Albanian, Serbo-Croatian there is not an adequate unique meaning, which in general will correspond to the meaning of the word "manage". In most of the cases in this context are used terms: "governance", leadership", "direction" and similar like that. Native speakers in these countries for these terms borrow the foreign word "management". In Spanish the similar term is called "manejar" which means you are taught to do it, leads and governs directs you etc. Management in general meaning has these synonyms: placement, regulation, planning, inspection, direction, achievement of goals, realization, and also domination, rigging incurrence and deception. If we analyze all these synonyms we can conclude that these include: regulation, planning, inspection, organization, direction or realization. All of these have the meaning of one way process, the manager says to his "inferior" employees what should they work. Manager decides what to work, whereas those "under" (inferiors) are equipments to achieve a certain goal. They often call the manager "boss" whereas his assistant "the right hand", because the right hand does exactly what the head says. Managers are called supervisors, because is presupposed that supervisors have excellent views in certain situations (Ramosaj, 2007).

Many authors have studied the similarities between management and placement. The well known theoretician, especially of placement theory H.A. Simon uses the term placement as a synonym for the management. In fact, the author starts from it that the process of placement equalizes itself with the phase of making decisions, something according to the opinion of many authors is wrong, because the process of placement includes all the phases of placement and not just making

decisions. We must have in mind that from the content that is understood with the term management, and also taking into consideration main functions of leadership is seen that it greatly fits with functions of management, that means the terms management and leadership often are synonyms. So report between the management and placement is similar with the report between leadership and placement. Naturally we have to do with managerial placement and with managerial decisions. According to Aki Murtiun making decisions respectively placement is the primary function of management. Whereas Yock Duncani states that if placement is not the only function of management, then it is surely its main function (Kuka, Shiroka-Pula & Krasniqi, 2006).

Management is a process to fulfill the objectives with and through other people. This means you should be able to plan what must be done, to organize the material, means and equipments and also you should organize and lead people to perfect these goals. In general, there are two extreme styles of management. Majority are somewhere in the middle. One of the extremes is dictatorial one. They are considered, autocratic managers, who use their authority to make decisions and then they order the others how to do that. The other extreme is known as "non-intervention" where the employees don't have the right to make decisions and to do their jobs, within determinations. Managing style depends from that how much you trust your employees and also from their abilities. Researchers have found that efficiency under the people leadership results from task combinations which must be done, type of employee, managers behaviors and from rewards structure (Mustafa, 2004).

Management shows a relatively universal activity because principles are applicable almost in all fields of economy and society: productivity, bank, trade, agriculture, sport, army, health religion, and international business etc. Also if we separate different organizations which are profitable or non-profit organizations or subjects and in the same time derives the question how to make them functional or how to govern and lead them, and then comes under consideration the request that what have in common and how are called all these people in these organizations from the different ones who deal with organizational work of these subjective. From this derives that these people are created with the name as managers, whereas their entire common activity is called management (Ramosaj, 2007).

What is strategic management? As an answer to the question submitted above, in the title of this text, we can say that after strategic management "hide" people who are obligated to plan the business in the highest level possible. Business-strategy as one of the highest functions in the enterprise is responsible to plan and to build a strong structure which will serve for overbuilding of business performances through additional activities (Biznesi.Info, 2012).

Strategic management initially has its origin from army strategies and as a process is transferred in the management of strategies in economy and then in non-profit organizations. The word "strategy" derives from the ancient Greek, in the years 507-508 before our era, where military council of Athens, consisted ten members which were called *Strategoí*, with great political and military power. In the semantic and origin aspect strategy is understood "ability to lead in the army" (Ancient Greek Encyclopedia " ; mastery to direct something. Management of strategy in Western economy is used from 60s of the twentieth (XX) century. In the US, in 1970, companies have implemented strategic management only 25%, in the 80s 55%, in the 90s 85% and from the year 2000 100%. This is an indicator that in the economical enterprises in the Republic of Kosovo, by all means should start not only to think for strategy but also to use the newest technologies of management until to the software managing process. Every period has its own characteristics of the development and the way how company behaves in such conditions. The switch of company from the concept as "closed system" to the "open system" especially the impact of the of suburb –external factors have conditioned the evolution of the problematic of long-term program. Today is implemented the strategic management to forecast the future. Strategic management is as a consequence of internationalization of the trade as a new form of the world trade that has impacted in the shortening of lifecycle of the company and exploiting cycle of products, whereas related with this also in the profit lifecycle (Mustafa, Kotorri, Krasniqi dhe Shala, 2010).

In the strategic aspect, management refers to the role of developing of the main objectives of activity and formulation of long-term plans for realization of these objectives. With the purpose of realization of the firm, management identifies stocks or strategies which should be undertaken and evaluated (Mustafa, 2008).

According to the all authors, strategic management is the permanent process of adjustment of the enterprise-surroundings, also its impact process in the suburb, in harmony with the goals of the company. Can be given definitions of different authors, but perhaps more summarizing is: "The process in which the management of the highest level (strategic leader) determines the direction of the long-term development of the company and its duties, by creating a strategy, its realization

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and permanent evaluation of realization, means that strategic management it is defined as a process which incorporates in years the goals of the company, formulation and the execution of the strategy and its control performance. According to Thompson and Striklend, in the process of the strategic management are foreseen five tasks: development (prosperity of strategic vision; determination of long-term goals; creation of the strategy and goals achievement; implementation and existence of strategy; the evolution of realization, review of new development and initiative of regulative corrections (Mustafa, Kotorri, Krasniq dhe Shala, 2010).

The main characteristics of small enterprises are innovations .Small enterprise often is the source of new materials, of processes, ideas, services and products. Most of the products nowadays derive from small enterprises. Small enterprises have done more than the half of the inventions in the last 30 years. In the 80s and 90s small enterprises have made 80% of the employments of the new working places. The spreading of the small enterprises in Kosovo, by the dynamic can be seen in three phases: a) first phase from 1991 to 1993, b) second phase from 1994 to 2000 and c) third phase from the year 2001. The establishment of these enterprises hasn't been as a result of suitable environment of business, but it happened from the necessity to create new jobs for the people who were expelled from work. Small enterprises have characteristics which can be known easily: they are: flexibility-which means switching activities in the light of changes of the market conditions and the quick adjustment of the capacity of request; direct relationships during the work-the employer has intern relationships with his employees and customers: the possibility of employment; management from one person: independence during the management (Biznesi.Info, 2013).

### **Hypothesis**

1."Strategic management has a positive connectivity with the strengthening of short-term and long-term objectives of the small enterprises.

2."Business strategy affects in the rise of financial indicators of small enterprises"

### **METHODOLOGY**

#### **Participants**

This research is realized in city of Peja in the Republic of Kosovo, in this research are included 40 small enterprises (27 in the center) of the city and 13 in the periphery. From them 37 have been familiar-individual businesses whereas only 3 have been corporations. The meeting with the managers of these enterprises is realized in beginning of the June, in their objects where they do their business activity.

#### **Instrument**

From the type this research is quantitative and for the collection of the data is used a questionnaire with 27 questions which are mainly about goals, objectives and organization of the enterprise structure and managing strategies of the enterprises. The questionnaire has been simple and there were no open questions but only multiple questions and to each question the subjects have had the opportunity to circle only one from the offered alternatives.

#### **Procedure**

To realize this entire questionnaire it was necessary to collect quantitative data from field with the application of the questionnaires in enterprise. In each business object we have gone separately and it is contacted the manager of the enterprise and from him was required to fill in a questionnaire about the strategic management of enterprises. From the beginning are informed the managers that the questionnaire is anonymous and confidential, and then all of them have accepted to fill in the questionnaire. The data are elaborated with statistical program SPSS.

## RESULTS

Table 1: Correlation between strategic management and short-term and long-term objectives of the enterprises.

Correlations		Strategic management of enterprises	Short -term and long-term objectives
	Pearson Correlation	1	.502**
	Sig. (2-tailed)		.001
Strategic management of enterprises	N	40	40
	Pearson Correlation	.502**	1
Short -term and long-term objectives	Sig. (2-tailed)	.001	
	N	40	40

\*\* . Correlation is significant at the 0.01 level (2-tailed).

To testify the first hypothesis of this research: *Strategic management has a positive relation with the empowering of the short-term and long-term objectives of the small enterprises* "

is made the correlative analysis and we have the statistical production. [ $r = .502^{**}$ ,  $p < .001$ ].

Table 2: Correlation between business strategies and financial indicators.

Correlations		Business strategy and work ethics	Financial indicators
Business strategy and work ethics	Pearson Correlation	1	-.220
	Sig. (2-tailed)		.172
	N	40	40
Financial indicators	Pearson Correlation	-.220	1
	Sig. (2-tailed)	.172	
	N	40	40

To testify the second hypothesis of this research; "*Business strategy affects in the rise of the financial indicators of the small enterprises*", is made the correlative analysis and we have the statistical production. [ $r = -.220$ ,  $p < .172$ ].

## Conclusions

In this research is discussed relevant literature about what is understood with the word management, is cited for the strategic management for the small enterprises and business organizations .It is concluded that management is an ability to direct, to lead and to achieve certain goals. Regarding to the strategic management is understood that is as a guiding, as a plan which helps in the realization of the short-term and long-term objectives. Therefore for every enterprise small, middle, or big one, good management and especially strategic management are important components that every business enterprise should possess. Then are raised two hypotheses which have led this research, so let's see if they are supported. The first hypothesis of this research was: "Strategic management has a positive relation with the empowering of the short-term and long-term objectives of the small enterprises", is made correlative analysis and we have the statistical production [ $r = .502^{**}$ ,  $p < .001$ ], which supports the first hypothesis. Thus a genuine strategic management affects in the empowering and the reflection of the short-term and long-term objectives of small enterprises.

The second hypothesis of this research was; "Business strategy affects in the rise of financial indicators", is made the correlative analysis and we have this statistical production [ $r = -.220$ ,  $p < .172$ , a result that is not significant and does not support the second hypothesis of this research.

## References

- [1] Biznesi. Info, *Çka është menaxhmenti strategjik?* 2012
- [2] Kuka I, Shiroka-Pula J, Krasniqi B. *Menaxhimi dhe vendosja*. Prishtinë . 2006
- [3] Mustafa I. *Doracaku për krijimin dhe zhvillimin e bizneseve*. IFK. Prishtinë. 2004
- [4] Mustafa, I. *Menaxhmenti financiar*. Prishtinë. 2004
- [5] Mustafa, N, Kotorri, M, Krasniqi, E, Shala, V. *Menaxhmenti Strategjik*. Prishtinë. 2010
- [6] Ramosaj B. *MANAGEMENT, Bazat e menaxhimit*. Prishtinë. 2007

## Appendice

- a) Yes
- b) No

## Questionnaire

### 1. Your enterprise is:

- a)Familiar-individual business
- b)Corporation
- c)Business with limited responsibilities

### 2. In which area is your enterprise?

- a) center
- b) periphery

### 3. Which is your position in the organization where you work?

- a) Executive chef or member of the highest team management
- b)Financial manager
- c) Manager of Marketing and sales
- d)Manager of production
- e)Manager of human resources
- f) Manager of lower level or supervisor
- g)Other (please specify \_\_\_\_\_)

### 4.How is organized the structure in your enterprise? Manager of the company

- a) Yes
- b) No

### 5. .How is organized the structure in your enterprise? Accounting

- a) Yes
- b) No

### 6. How is organized the structure in your enterprise? Purchasing manager

- a) Yes
- b) No

### 7. How is organized the structure in your enterprise? Sales manager

- a) Yes
- b) No

### 8. How is organized the structure in your enterprise? Human resources

### 9. Short-term and long-term objectives? Sale of production

- a) Yes
- b) No

### 10. Short-term and long-term objectives? Quality of the product

- a) Yes
- b) No

### 11. Short-term and long-term objectives? Profitability

- a) Yes
- b) No

### 12. Short-term and long-term objectives? Survival

- a) Yes
- b) No

### 13. Short-term and long-term objectives? Social generality

- a) Yes
- b) No

### 14. Short-term and long-term objectives: moral of employees, and good relationships between them

- a) Yes
- b) No

### 15. What factors have encouraged you enterprise to choose the customers:

- a) Demographic factors
- b) Socio-economic factors
- c) Psychological factors
- d) Perceptual factors

### 16. Strategy of the cost leadership: Levels of competition

- a) Not at all
- b) Very little

- c) Little
- d) Neutral
- e) Moderately
- f) Largely
- g) In a large extent

**17. Strategy of the cost leadership: Reduction of the cost product**

- a) Not at all
- b) Very little
- c) Little
- d) Neutral
- e) Moderately
- f) Largely
- g) In a large extent

**18. Strategy of the cost leadership: Reduction of the additional costs**

- a) Not at all
- b) Very little
- c) Little
- d) Neutral
- e) Moderately
- f) Largely
- g) In a large extent

**19. Aims of enterprise objectives: Earning increase**

- a) Very poorly
- b) Poorly
- c) Below average
- d) Over average
- e) Good
- f) Very Good

**20. Aims of enterprise objectives: Income increase**

- a) Very poorly
- b) Poorly
- c) Below average
- d) Over average
- e) Good
- f) Very Good

**21. Aims of enterprise objectives: Return in investments**

- a) Very poorly
- b) Poorly
- c) Below average
- d) Over average
- e) Good
- f) Very Good

**22. Aims of enterprise objectives: Cost reduction**

- a) Very poorly
- b) Poorly
- c) Below average
- d) Over average
- e) Good
- f) Very Good

**23. Aims of enterprise objectives: Improvement of the quality**

- a) Very poorly
- b) Poorly
- c) Below average
- d) Over average
- e) Good
- f) Very Good

**24. Business strategy and work ethics**

- a) The effect of the enterprise in your suburb
- b) Work ethics and interpersonal relationships in the enterprise
- c) The responsibility as base in the society in which we work

**25. Financial indicators: Income**

- a) Medium
- b) not important
- c) Important
- d) Very important

**26. Financial indicators: Capital**

- a) Medium
- b) Not important
- c) Important
- d) Very important

**27. Financial indicators: Profit**

- a) Medium
- b) Not important
- c) Important
- d) Very important

**Tables**

1. Your enterprise is:

	Frequency	Percent	Valid Percent	Cumulative Percent
Familiar-individual business	37	92.5	92.5	
Valid Corporation	3	7.5	7.5	92.5
Total	40	100.0	100.0	7.5 100.0

2. In which area is your enterprise?

	Frequency	Percent	Valid Percent	Cumulative Percent
Center	27	67.5	67.5	67.5
Valid Periphery	13	32.5	32.5	100.0
Total	40	100.0	100.0	

3. Which is your position in the organization where you work?

	Frequency	Percent	Valid Percent	Cumulative Percent
Executive chef or member of the highest team management	37	92.5	92.5	92.5
Valid Financial manager	3	7.5	7.5	
Total	40	100.0	100.0	100.0

4. How is organized the structure in your enterprise? Manager of the company

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	40	100.0	100.0	100.0

5. How is organized the structure in your enterprise? Accounting

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	38	95.0	95.0	95.0
Valid No	2	5.0	5.0	100.0
Total	40	100.0	100.0	

6. How is organized the structure in your enterprise? Purchasing manager

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	29	72.5	72.5	72.5
Valid No	11	27.5	27.5	100.0
Total	40	100.0	100.0	

7. How is organized the structure in your enterprise? Sales manager

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	35	87.5	87.5	87.5
Valid No	5	12.5	12.5	100.0
Total	40	100.0	100.0	

**8. How is organized the structure in your enterprise? Human resources**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	19	47.5	47.5	47.5
Valid No	21	52.5	52.5	100.0
Total	40	100.0	100.0	

**9. Short-term and long-term objectives? Sale of production**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	37	92.5	92.5	92.5
Valid No	3	7.5	7.5	100.0
Total	40	100.0	100.0	

**10. Short-term and long-term objectives? Quality of the product**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	39	97.5	97.5	97.5
Valid No	1	2.5	2.5	100.0
Total	40	100.0	100.0	

**11. Short-term and long-term objectives? Profitability**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	40	100.0	100.0	100.0

**12. Short-term and long-term objectives? Survival**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	24	60.0	60.0	60.0
Valid No	16	40.0	40.0	100.0
Total	40	100.0	100.0	

**13. Short-term and long-term objectives? Social generality**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	40	100.0	100.0	100.0

**14. Short-term and long-term objectives: moral of employees, and good relationships between them**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	40	100.0	100.0	100.0

**15. What factors have encouraged you enterprise to choose the customers:**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Demographic factors	15	37.5	37.5
	Socio-economic factors	11	27.5	65.0
	Psychological factors	2	5.0	70.0
	Perceptual factors	2	5.0	75.0
Total	40	100.0	100.0	100.0

## 16. Strategy of the cost leadership: Levels of competition

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not at all	1	2.5	2.5	2.5
Neutral	5	12.5	12.5	15.0
Moderately	6	15.0	15.0	30.0
Largely	13	32.5	32.5	62.5
In a large extent	15	37.5	37.5	100.0
Total	40	100.0	100.0	

## 17. Strategy of the cost leadership: Reduction of the cost product

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Moderately	10	25.0	25.0	25.0
Largely	10	25.0	25.0	50.0
In a large extent	20	50.0	50.0	100.0
Total	40	100.0	100.0	

## 18. Strategy of the cost leadership: Reduction of the additional costs

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not at all	1	2.5	2.5	2.5
Neutral	1	2.5	2.5	5.0
Moderately	8	20.0	20.0	25.0
Largely	14	35.0	35.0	60.0
In a large extent	16	40.0	40.0	100.0
Total	40	100.0	100.0	

## 19. Aims of enterprise objectives: Earning increase

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Over average	11	27.5	27.5	27.5
Good	11	27.5	27.5	55.0
Very good	18	45.0	45.0	100.0
Total	40	100.0	100.0	

## 20. Aims of enterprise objectives: Income increase

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Over average	4	10.0	10.0	10.0
Good	18	45.0	45.0	55.0
Very good	18	45.0	45.0	100.0
Total	40	100.0	100.0	

## 21. Aims of enterprise objectives: Return in investments

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Average	1	2.5	2.5	2.5
Over average	13	32.5	32.5	35.0
Good	11	27.5	27.5	62.5
Very good	15	37.5	37.5	100.0
Total	40	100.0	100.0	

## 22. Aims of enterprise objectives: Cost reduction

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Poorly	1	2.5	2.5	2.5
Average	3	7.5	7.5	10.0
Over average	14	35.0	35.0	45.0
Good	5	12.5	12.5	57.5
Very good	17	42.5	42.5	100.0
Total	40	100.0	100.0	

## 23. Aims of enterprise objectives: Improvement of the quality

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Over average	10	25.0	25.0	25.0
Good	11	27.5	27.5	52.5
Very good	19	47.5	47.5	100.0
Total	40	100.0	100.0	

## 24. Business strategy and work ethics

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Work ethics and interpersonal relationships in the enterprise	3	7.5	7.5	7.5
The responsibility as base in the society in which we work	37	92.5	92.5	100.0
Total	40	100.0	100.0	100.0

## 25. Financial indicators: Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Important	16	40.0	40.0	40.0
Very important	24	60.0	60.0	100.0
Total	40	100.0	100.0	

## 26. Financial indicators: Capital

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Important	16	40.0	40.0	40.0
Very important	24	60.0	60.0	100.0
Total	40	100.0	100.0	

## 27. Financial indicators: Profit

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Important	22	55.0	55.0	55.0
Very important	18	45.0	45.0	100.0
Total	40	100.0	100.0	

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## Independence of Independent Institutions: The Case of Independent Media Commission (IMC) in Kosovo

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### Abstract

This paper addresses the issue of independent institutions in Kosovo that are constitutional category, their operation and role within the state, problems and challenges that arise especially in those areas that the issue of regulation is very sensitive. The key focus in this study is IMC. This paper contains analysis of political influence on financing and appointment in decision making bodies. Furthermore, it includes analysis of the political independence from industry. These issues will be addressed according to the guidelines and recommendations of the European Union compared with domestic legislation and various European practices. This study has been done using secondary data, and it concludes that Independent Institutions in Kosova are not immune from the political and industry influences, and it provides some recommendations on how to avoid such influences.

**Keywords:** Influences, Independence, IMC, financing, political, industry

### 1. Introduction

Independent institutions play a very important role in a contemporary society. Their independence in relation to state bodies and political parties essentially reflects the democratic culture, development concept, intellect, social direction, and expectations of citizens.

The more powerful and independent are the independent institutions; their decisions will be so beneficial for societies where they operate. Therefore, it is vital that independent institutions function on the basis of the principle of balance and control, with full responsibility and accountability to the public interest. Societies that have emerged out of transition, wars, or those that have embraced the liberal political concept of decision making, have immensely benefited from the independent functioning of these institutions. Furthermore, these institutions have contributed greatly to the country's democratization, economic development, freedom of expression, social equality, and in the process of European and Euro-Atlantic integration.

The Republic of Kosovo, along with the state-building process has worked regularly in the legal infrastructure and funding in order to strengthen independent institutions gradually and function in harmony with the directives of the European Union. Despite the great progress that has been exceptionally made in recent years, independent institutions in reality still are not immune to political and industrial interferences.

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The purpose of this research is to conduct an objective evaluation of the functioning of independent institutions in Kosovo, with particular emphasis on the Independent Media Commission (IMC), due to the role, its function and importance in direct relation with printed and electronic media. And indirect contribution of this institution in all areas and fields of Kosovo's society.

## 2. Literature Review

### 2.1 Influences in the Independent Institutions

Separation and balance of powers, which was previously just a theoretic formulation, raised early in a general form of John Locke and fully elaborated and argued by Montesquieu (Omari, 2011), almost a century later, it still has influence in the state organization and operation of political institutions.

The reason why most institutions have been created in the mid-90s, it may be that in most European countries, the political system has changed. We have gone through the processes of privatization and liberalization (Gilardini, 2008), and in the same time there has been a loss of trust in the institutions.

Now, the independent institutions are responsible for the exercise of their activity, as guaranteed by the constitution and other legal acts. They perform activities independently on a specific area that is independent from other branches of government. Besides the autonomy in carrying out their activities, there is also the control mechanism, which aim is to prevent the abuse of power. In the Republic of Kosovo institutions have been created based on the principle of balance and control powers. The Constitution of the Republic of Kosovo in its article 4, defines separation of powers (Constitution of Republic of Kosovo, 2008).

As a point of study in this research will be the Independent Media Commission in Kosovo (IMC), which is an independent body and its powers are defined by Article 141 of the state top act on, in constitution (Constitution of Republic of Kosovo, 2008), this institution is responsible for the regulation, management and supervision of the broadcasting frequency spectrum.

Besides the Constitution of the Republic of Kosovo, the powers of the IMC are defined by the Law on IMC, among other things, the law stipulates that IMC regulates the rights, obligations and responsibilities of natural and legal persons who provide media services audio and audiovisual (Law on the Independent Commission for Media, no. 04 / L-44, March 2 2011), licenses public and private broadcasters, giving entities authorized the right to use frequencies in the frequency spectrum of the transmission, and licenses all audiovisual media services, and under the terms of the license, IMC requires those who obtain to respect the law and regulations issued by IMC.

Viewed from the perspective of a number of competencies, necessarily doubts are raised that where they are coming from members of the decision maker? Who appoints them? Or can they be independent from the influences of external forces to perform their function properly? , and for all issues and dilemmas raised the mind goes to the legal basis which determines the appointment manner, that what criteria the law of the IMC has defined.

But in this paper except the law, we have referred to the recommendations of the Committee of Ministers to member states on the independence and regulatory functions (Recommendation of the Committee of Ministers to member states on the independence and regulatory functions, Recommendation Rec (2000) 23). Among other where the legislative framework specifies that Member States should ensure the establishment and unimpeded functioning of regulatory authorities for the broadcasting sector by devising an appropriate legal framework. The rules and procedures governing or affecting the functioning of regulatory authorities should clearly affirm and protect their independence.

Duties and powers of the regulatory authorities for the broadcasting sector, and the ways making them accountable, the procedures for appointment of their members and the means of their funding should be clearly defined by law, and without doubt these are two elements that significant impact the regulatory independence, because if we have political appointment or is funding that goes through government control, obviously we do not have independence, so we need a clear definition in order to protect the independence of institutions of any intervention, especially by political forces or economic interests.

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To this end, the recommendation of the Committee of Ministers foresees that should be set specific rules regarding incompatibility, as defined in order to avoid that regulatory authorities are under the influence of political power, members of regulatory authorities not to exercise functions or hold interests in other companies or organizations in the media or related sectors, which could lead to a conflict of interest in connection with membership of the regulatory authority. Furthermore, rules should guarantee that the members of these authorities are appointed in a democratic and transparent way, not to come from interest groups, not to be close to them or not take instructions from any external body. But this is not enough that only a provision in the law superficially to note that these actions are not permissible.

Where we should focus on more is the way of appointing candidates to decision-making body for the independent institutions, the right to nominate, and the barriers to become a candidate. Also very important is the composition of the committees dealing with interviewing and selection of candidates (usually done by deputies and it all is dictated by party recommendation), then see how to achieve the objective that an institution be independent. Legal regulations must clearly specify the actions to be taken to achieve the goal.

Based on our reality and what is required by IMC law, certainly we notice some shortcomings starting it that one of the criteria is that it does not allow IMC employees to be members of the decision-making, with this prohibition law lawmakers make a legal and practical error here, when we say so, we consider legal law of Kosovo civil servants which does not provide these prohibitions..

While the practice part is that the IMC staff throughout their careers are associated with the regulation of the media and, it is said that they are professional in this area, and to forbid them to obtain such positions is certainly is absurd in itself. Even more, it is another point of the law which stipulates that former employees of the IMC in two (2) years are after leaving IMC are strictly forbidden to be considered for positions in decision making body. This means that if a person want to advance in their professional career should be out of professional flows for two years and after this period, such candidates certainly will be have lack of relevant information and not very competent to run for decision-making body. The purpose of these two provisions are entirely without any analysis and are not based on any practice of independent institutions within the country, or even international practices.

### **3. Methodology**

In this research, qualitative methods will be used with the focus IMC, as an independent institution in Kosovo. Critical analysis will be adapted to derive a more efficient research. This research was developed based on secondary data, using existing literature, reports from various international academic journals, and existing laws. These data are derived from reliable sources, impartial and academic with a very high level of quality.

Data analysis used in this study is of the interpretive technique. The most common analysis of qualitative data is observer impression, a situation where the researcher observes and analyzes the data, interprets through the formation of an impression and reports the impression in the structured form and quantitative sometimes.

### **4. Analysis**

#### **4.1 Political Influences**

Also, with the law of the IMC is tried to avoid political interference in the process-of appointments making it impossible to be a member of the decision-making persons holding public positions, elected and appointed (the public officials) or persons who have been in these positions during the last two (2) years, members in the leadership positions of a political party or persons who have been in these positions during the two (2) years (Law on the Independent Commission for Media, no. 04 / L-44 , March 2, 2012). The lawmaker apparently even here have not well specified, since in practice many high ranking officials of political parties are presented who are not elected and are not part of the governing body, such as the advisers of head of political parties or political party spokespersons, and other similar cases, where these individuals are considered too close to political parties, while the law does not provide stops for them.

Continuous political interference are evident, it is mentioned in international reports (Kosovo progress report, 2014), which states that the independence of media regulator has been challenged by political interference.

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Besides political interference, the other problematic is the impact of industry or interest groups that have the greatest impact and for this the law determines, but still does not clearly specify that persons who have a financial interest, directly or who currently work or who has worked in any broadcaster in the operation of telecommunications or broadcasting and in the IMC in the last two (2) years, cannot be nominated for the members of the decision-making body.

#### **4.2 Impacts from the financing**

It can rightly be concluded that these restrictions are more for illustration of the law, as oppose to achieve the certain effect, the reason is that if we refer to the law of the IMC, and stop first at ways of financing , we note that although the IMC by law collects the license fee (Law on the Independent Commission for Media, no. 04 / L-44, 2 March 2012), the same is unable to utilize for its services, which means the use of these be conform rules as stated in the law for the management of public finances, but as a way of financing IMC, allocated financial resources from state budget are foreseen.

The funding manner of independent institutions in general is not assessed practically, because there is not available a special funding structure. Part of the majority of these institutions is funded directly from the state budget of Kosovo, with the exception of a limited number that are allowed by law to collect the revenue from licensee's fees. For reason of not a good execution of payments, most institutions fail and face difficulty to collect revenue other than those that are separate from the central budget. The survey that is done by the OSCE on the financing of independent institutions shows that the low budget prevents them to perform their activities and functions due to insufficient budget. Separate budget lines from the central budget are too small in relation to the initial demands that these institutions consistently address (OSCE, 2012).

In current situation, to overcome financing barriers and in order for the independent institutions to exercise their power free of influences, the lawmakers should amend the laws and provide means of financing other than from state budget. All the income that derives from license fees, fines and penalties, membership fees directly should go into the institutions where it belongs. The state role should be only of supervision nature to ensure that payments are received and processed according to existing laws.

#### **4.3 Impacts from Industry**

The main point that foresees the recommendation of the Committee of Ministers is the impact of the industry, and if we stop just at this issue we see that here except for cases of conflict of interest in decision-making, we have to do with the impact of the industry power, which especially happens via media through various television stories based on news reporting while at the same time we can say that this is blackmail, and it occurs prior to taking a decision that potentially harms the interests of industry players.

The law does not have strict and clear restrictions, and it casually mention a few stops, and we can say that the essential elements of the impact of the industry are not addressed in the law of the IMC, except others does not stop to be part of the decision making body people who have their relatives in management positions in any company that their work is related to IMC, or other case sets limits only for last two years, which means that for a few years a regulator of the media can be guided by former journalist and former editor of a particular medium

### **5. Conclusion**

We can clearly observe that the three key elements that an independent institution to be independent have not been adequately addressed by the legislation in force, and for this it can be concluded that independent institutions face problems of political and financial influence at all times. There have been different influences that have started with appointment method of decision making bodies, the way financing as well as other different influences from interest groups.

To this end, this has been argued international reports, such as Kosovo Progress Report of 2014, but not only, who among others stress that independent institutions are challenged by political interference and other interventions.

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In order to avoid political and other interventions, it is necessary to think about:

- A reformation of the legal regulations that guarantee the functioning of these institutions;
- To have a special care at the means of financing (from the income generated by the services they perform or from state budget);
- The criteria that should be met for the candidates to become members of decision making body;
- The composition of committees for interviewing and preparing the final list of candidates;
- A clear distinction of competences between the decision-making powers which are temporary and professional staff that is permanent, and to ensure that both will do their job independently.

## References

- [1] European Commission, Kosovo Progress Report, 2014, page 51.
- [2] Gilardi, F. Published by Edward Elgar Publishing Limited Glensanda House Montpellier Parade Cheltenham Glos GL50 1UA UK 2008, page 4
- [3] Law on Independent Media Commission, N0. 04/L-44, 2 March 2012, article 3, page 3
- [4] Law on Independent Media Commission, No. 04/L-44, 2 March 2012, article 12, page 6
- [5] Law on Independent Media Commission, Nr. 04/L-44, 2 March 2012, article 3, page 3
- [6] Omari, L. Ndarja e Pushteteve dhe Pavarsia e Institucioneve Kushtetuese, Botimi Elena Gjika, Tiranë, 2011, faqe 3
- [7] Recommendation Rec (2000)23 of the Committee of Ministers to member states on the independence and functions of regulatory authorities for the broadcasting sector (Adopted by the Committee of Ministers on 20 December 2000 at the 735th meeting of the Ministers' Deputies).
- [8] The Constitution of the Republic of Kosovo, 15 June 2008, article 141, page 58
- [9] The Constitution of the Republic of Kosovo, 15 June 2008, article 4, page 1 OSCE (2012).
- [10] The State of Independent Institutions in Kosovo. Organization for Security and Co-operation in Europe MISSION IN KOSOVO

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## The Model of Factoring Agreement to Develop Small Medium Enterprises in Indonesia

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### Abstract

The Small Medium Enterprises are benefited with factoring agreement as an alternative of financing scheme. The process of this scheme is more efficient since it is not required collateral, no time consuming and included for the account payable management as well as protection to the enterprises. The main objective of this research is to formulate a social engineering model as a short guide to regulate the factoring agreement for financing scheme to the observed Small Medium Enterprises. The progressive law, welfare of state, agreement, and the other relevant theory have been applied for this study. Further, the methods of legal pluralism and integrated with normative, sociology, and philosophy approaches have been invoked in this study. The result indicates that a positive prospect are found soundly. But of course need a strong commitment among the stakeholders in charged of A (academician), B (business), G (government), and C (community).

**Keywords:** Factoring, Agreement, Small Medium Enterprises, Law, Indonesia

## I. INTRODUCTION

### A. Background

Up to now many business sectors, especially small and medium enterprises face many problems in their business activities. The problems generally associated with the ability and limited capital resources, weak marketing capabilities, weaknesses of credit management led to the increasing number of bad loans. As a result, the business continuity is threatened, which in turn makes the company obtain additional financing through finance institutions.

With factoring, companies can obtain financing more easily and quickly than by obtaining funds from banks. In addition, with the support of experienced personnel and experts in the field, the factoring company can help overcome difficulties of credit management, so that the seller accounts (creditors) may be more concentrated on increased production and sales activities.

Factoring is a financing that can be done by the Financing companies as defined in the Presidential Decree No. 61 of 1988 which was later repealed by issuing Presidential Decree No. 9 of 2009 on Financing Institution. The consideration of the government issued the decree is to support economic growth, the public needs funds, and the provision of funds, it is deemed to be expanded so that its role is as a means developing funding sources).

The main principle in the procurement of financial institutions is to help small and medium enterprises in the procurement of capital for business continuity. This is an evidence from the absence of an obligation for employers to submit material

guarantees (collateral) to obtain funds through financial institutions, one of which is through factoring. It is different from the bank, which has been defined in the Act No. 7 of 1992 as amended by Law No. 10 of 1998, which requires the debtor to submit warranty.

Article 1 point 6 Indonesian Presidential Decree No. 9 of 2009 stipulates that "the Factoring Company is a business entity that conducts business in the form of financing, the purchase of short-term receivables as well as the maintenance of accounts."

Factoring is an activity which essentially an agreement. Factoring agreement is not specifically regulated in Civil Code and other legislation. Settings available until now only administrative in nature, whereas the rights and obligations of the parties is not regulated. Factoring agreement may increase in Indonesia based on the principle of freedom of contract (Article 1338 paragraph (1) Civil Code). Factoring agreement can be subordinated to Civil Code Pursuant to Article 1319 Civil Code, which regulates the named and no named agreement.

According to Jenie, factoring agreement is a new type of independent agreement (*sui generis*). Factoring has administrative functions, protection of credit, financing function. Financing services, according to Djumhana through the transaction or contract, Factoring Company can provide pre-financing up to 80% of total accounts receivable. Transactions can be made on the basis of risk without recourse factoring the bills stalled taken over by the Factoring Company. No financing services, do the factoring company to serve the sake of the client's credit management. No financing services can be divided into four, namely: Credit investigation, Sales ledger administration, credit control, including collection. In this case the factoring company monitors sales made by either party clients, including billing procedures stipulated that the receivable accounts to be disbursed in time, Protection against credit risk by seeking ways to safeguard against the possibility of not cashing receivables (bad debts).

In a factoring agreement basically there are three parties involved, namely: (Factoring Company); The seller or bills receivable (client); debtors/ customer. Factoring Companies is a business entity that conducts business financing in the form of purchase and or transfer and management of short-term bills receivable or a company from trading operations inside or outside the country. According to Djairan, sellers Company receivables (client) is the party with the receivables arising from the sale of goods or services to customers with credit terms. The customers is the party who owes money to the company selling the receivables as a result of the purchase of goods or services from companies selling receivables with credit terms.

According to Jenie, factoring agreement is an agreement in the form of standard agreement, i.e the agreement form and content have been prepared in advance by one of the parties, namely by the Factoring Company. The client only accepts or rejects the agreement. If judging the overall content the agreement emphasizes client obligations rather than rights. This shows an imbalance in the relationship between the client with the Factoring Company.

An imbalance in the legal relationship of the parties which resulted in a lack of legal protection for the clients, while special arrangements regarding the factoring yet it is very urgent to do law reform in a comprehensive manner, in order to deliver to the factoring arrangement. Therefore, we need a model factoring agreement to provide legal protection balanced between the parties, especially in the development of small and medium enterprises.

## **B. The Problem of The Research**

From the description of the background of emerging research issues as follows.

The problems of this study are:

1. How is the implementation of the factoring agreement for the development of small and medium enterprises in society?
2. What are the obstacles that arise in the use of factoring in the development of small and medium enterprises?
3. How is the model setting factoring agreement in the future for the development of small and medium enterprises?

## II. Materials and Methods

### A. Function of Factoring

In Article 1 point 6 Indonesian Presidential Decree No. 9 of 2009 stated that "the Factoring Company is a business entity that conducts business in the form of financing the purchase of short-term receivables as well as the maintenance of accounts."

Knowing the factoring activity, factoring is an activity which essentially is an agreement. Factoring agreement is not specifically regulated in Civil Code and other legislation. Settings are available until now only a mere regulation of an administrative nature, while establishing the rights and obligations of the parties is not regulated. Factoring agreement, can enter and expand in Indonesia based on the principle of freedom of contract (Article 1338 paragraph (1) Civil Code Factoring agreement can be subordinated to Civil Code Pursuant to Article 1319 Civil Code, which regulates the treaty named and not named.

According to Jenie, on the provision in respect of receivables purchase agreement as stipulated in Civil Code, the factoring agreement has clear similarities with the receivables purchase agreement. But to establish that the factoring agreement is a receivables purchase agreement as stipulated in Civil Code is also difficult. This is because there is no provision in the factoring agreement which does not contain in the provisions of the agreement of sale and the purchase of receivables, while these provisions are precisely the typical characteristics of a factoring agreement, which distinguishes it from an agreement of sale and purchase of receivables outstanding, so it can be said it is a new type of agreement independent (*sui generis*).

According to Ramlan Ginting, factoring has the following functions.

1. Administrative Functions.
2. Functions of credit protection.
3. The function of financing.

Regarding the factoring services, it can be divided into two main parts, namely:

#### a. Financing services

According to Djumhana through the transaction or contract, Factoring Company can provide pre-financing up to 80% of total accounts receivable. Transactions can be made on the basis of risk without recourse factoring the bills stalled taken over by the Factoring Company. According Tedjosaputra (1995: 7) In the case that the Company Factoring provides services financing, it can provide pre-financing to 80% or even 90% of the total accounts receivable, soon after the signing of the factoring agreement, and the production of evidence of sales of goods (invoices) to the Factoring Company, as well as after the fulfillment of the other conditions.

#### b. No financing services.

In the case that the Company Factoring provides no financing services, the company serves the interests of the client's credit management. No financing services can be divided into four, namely:

- 1) Credit investigation, before approving the purchase of receivables, the client requested Factoring Company to assess the ability to pay of the customer.
- 2) Sales ledger administration, together with sales accounting functions, which regulate the administration of client receivables.
- 3) Credit control, including collection. In this case the factoring company monitor sales done by either party clients, including billing procedures stipulate that the accounts receivable to be disbursed on time.

4) Protection against credit risk. In this case Factoring Companies seek ways to safeguard against the possibility of not cashing receivables (bad debts).

There are several types of factoring, among others from the perspective of the client's involvement:

(1) Recourse Factoring, the type of factoring, which, if the Company Factoring did not get a bill from the customer, then the client is still liable to pay it off. There is even a kind of recourse factoring which provides an option for the Company's receivables factoring to sell back to the client.

(2) Without Recourse Factoring, which is a type of factoring that puts a strain bill along with all the risk entirely on the Factoring Company. Thus, if there is a failure in the collection of accounts receivable, the responsibility of the Company Factoring themselves and the client no longer in charge, unless there is an element of fault on the part of clients.

## **B. Legal Relationship of the Parties to the Factoring Agreement**

In a factoring agreement basically there are three parties involved, namely:

- a. Factoring Companies (Factoring Company);
- b. The seller or bills receivable (clients, client);
- c. Debtor (debtors, customer)

Factoring Company is a business entity that conducts business financing in the form of purchase and or transfer of receivables as well as the maintenance of a company from trading operations inside or outside the country. Seller Accounts Receivable (client) is a company that sells and or transfer receivables arising from commercial transactions to the Company Factoring. According to Djairan Company receivables seller is the party with the receivables arising from the sale of goods or services to customers with credit terms. Vending companies such receivables are comprised of companies the manufacturer, supplier, or wholesalers who usually sell goods or services to others for resale to the final consumer.

Company customers is the party who owes money to the company selling the receivables as a result of the purchase of goods or services from companies selling receivables with credit terms. The company's customers can consist of manufacturers, suppliers, wholesalers, or retailers that sell goods or services to the end consumer.

According to Jenie, factoring agreement is an agreement in the form of standard agreement, i.e the agreement form and content has been prepared in advance by a party. In general factoring agreement is made raw, in this case the rights and obligations of the parties have been determined by the Company Factoring. The client-side only accepts or reject the agreement.

According to Kusumawardani, Factoring Company does not require collateral from the client. Insufficient clients ensure that the receivables are sold billable to the customer. This is one of the characteristics of financing with factoring that distinguishes it from financing that distinguishes it from financing services in the form of bank loans. that distinguishes it from financing services in the form of bank loans.

## **C. Method**

This study uses a triangular concept of legal pluralism, which integrates: philosophical approach, natural law (morality / ethics / religion, Normative approach, state law (positive law, sociological approach, societal (socio legal approach). The location of this research is DKI Jakarta and Semarang and primary data sources and activities, consists of: (1) Institute of makers of Law (Law Making Institution): government, Parliament, (2) Stakeholders (Role Occupant), namely government, business, community; (3 ) Institute IMPLEMENT Sanction (Sanction Activity Institutions) or the Law Enforcement Institutions, namely Judges; (4) Domain Expertise: Legal Experts Economics and Technology, Law and Society, Civil Law and Business Law, Contract Law, Security Law, Law of Financing.

The data in this study was obtained through the activities of observation, interviews, conducted indepth interviews with open-ended questions and closed questions . The research is fitted with a research library. The primary data analysis

techniques used Strauss and J. Corbin, the researchers analyzed data from the field . Conduct an analysis of all the facts juridically, philosophically and sociologically then used to make the setting ideal construction of the factoring agreement to provide legal protection for the development of SMEs. Secondary data analysis, conducted in deductive and inductive logic.

The validity of the data relies on the "degree of reliability" (level of confidence) or credibility via triangulation techniques and methods.

### III. Results and Discussion

The implementation of the factoring agreement for the development of Small and Medium Enterprises

In the agreement there are three stages, the pre contractual, contractual and post-contractual. At the pre-contractual stage It occurs offer and acceptance between the parties client and factoring companies. Contractual stage occurred since there is no agreement between the parties. Furthermore, post-contractual phase is the implementation phase of the agreement. The agreement should be based on the principles of law contract which includes:

1. The principle consensualisme: the agreement is based on agreement.
2. The principle of freedom of contract: the freedom of the parties determine the parties, the form of the agreement, the agreement.
3. The principle of pacta sunt servanda: the binding force of the agreement, meaning that the agreement that has been agreed as the law applicable to the parties.

The results showed that the factoring agreement meets the characteristics of a standard agreement, as drafted unilaterally by the Factoring Company. Clients only have the option to accept or reject the agreement. Clients are not involved in setting up and did not have the opportunity to change the contents of factoring agreement that has been made in the form factoring agreement. With the signing of factoring agreement, it is considered that the client has approved the agreement, and bound to the agreement, although if judging the overall content of the agreement emphasizes client obligations rather than rights. This shows an imbalance in the relationship between the client with the Factoring Company.

The imbalance and these deviations can be further described as follows.

- 1) The obligation of the client is to submit warranty.
- 2) Clause with recourse.
- 3) Right Factoring Company collects in any way.
- 4) The obligation of the client is to provide information about the state of the customer, and protect the interests of the Company Factoring in all respects.
- 5) The Right Factoring Company is to change the cost of factoring any time without the consent of the client.

The imbalance and distortions can be seen in the following results:

Table 2

Factoring Agreement irregularities in practice.

Irregularities or mismatch Philosophically and Juridically, it ideally should be Empirical Facts.

1. The obligations of the client is to submit a guarantee there is always a
2. recourse clause: if the Company Factoring does not get the bill from the customer, entirely the responsibility of the client should it be the responsibility of the Company Factoring in providing services non financing which is always a clause of accomplishing receivables with recourse

3. Right Factoring Company to collect in any way supposed memperhatikan ways that really do in any way
4. Right Factoring Company to change the cost of factoring any time without the consent of the client (this is contrary to the principles of treaty changes that it must deal with the agreement of both parties as well as the implementation of the clause in the agreement Factoring Companies that can change at any time without the client's consent.

Source: A study of the Agreement Text and practices.

#### C. The Constraints of the Implementation Factoring agreement for Small and Medium Enterprise Development.

In the implementation of the factoring agreement in the development of small and medium enterprises there are many obstacles as follows:

1. There are no specific rules about factoring agreement.

Factoring is an activity which essentially is an agreement. Factoring agreement is not specifically regulated in Civil Code and other legislation. The settings that are available until now only administrative in nature, whereas the rights and obligations of the parties is not regulated. Factoring agreement may enter and flourish in Indonesia based on the principle of freedom of contract (Article 1338 paragraph (1) Civil Code ). Factoring agreement can be subordinated to Civil Code Pursuant to Article 1319 Civil Code, which regulates the treaty named and no named agreement.

2. The difficulties of provision of a guarantee by the client.

Small and medium-sized companies generally do not have objects that are sufficient to meet the requirement to provide collateral in obtaining factoring financing .

3. Lack of ability in the management of client accounts.

4. All the risks of billing charged to the client. In general, small and medium enterprises do not have enough ability to manage accounts. As a result, frequent bad loans that could disrupt the availability of funds in the development of its business. In addition, small and medium enterprises may have difficulties in concentration for the marketing of their products.

5. The client must only sells receivables to a factoring company. It thus creates difficulties due to limited sources of outside financing.

#### D. Model Factoring Agreement on the Future for the development of Small Medium Enterprises

The presence of various obstacles in the implementation of factoring in the development of small and medium enterprises have demanded a renewal of the law, especially the law of contract governing the agreement factoring in a comprehensive manner, covering all components in the legal system, which, according to Friedman composed of substantial components , structural components and cultural component, because all the three have a strong bond. Robert B. Seidman argues that "The law of non-transferability of law", which is a proposition that the laws of a nation can not simply be transferred to other nations. It is caused by the social structure, culture nurseries law was not the same. Changes in the value or the basic rules of society demanding to amend laws in order to constantly adapt to the society.

The development of national laws is the fundamental base philosophy of Pancasila and the Constitution of the State (1945). Grand political design of national law is based on the paradigm of Pancasila is the paradigm of the Godhead (moral religious), humanitarian (humanistic), nationality (unity / nationalistic), democracy , social justice.

Reconstruction is an important source of social relationships to achieve common order. Nonet and Selznick, argued that the law is responsive, that is the law as a facilitator of response to social needs and social aspiration.

Satjipto Rahardjo offers a concept of Progressive Law contrasting of the two components which are the basis in law, namely the rules and behavior .Here, the law is placed as an aspect of behavior, but also at the same rules. The law is for man and not vice versa. If the law is not able to achieve such a guarantee, it must be done, and there must be a concrete effort to

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that law, including carrying out arrangement and rearrangement. Law is in the process to continue to be (as a process of law, law in the making). Because the law is for a man, it must be in accordance with human existence where the laws are. Therefore, in the efforts to reform national laws, there should be assessment and excavation national values based on Pancasila and rooted in values that exist in the community (the values of religious and cultural values / customs). Laws should reflect three basic values by Gustav Radbruch called *idee des recht*, which include fairness, expediency and legal certainty.

Based on the theories and concepts related to the factoring agreement, we need a regulatory model factoring agreement in the future to provide legal protection of the parties, including small and medium enterprises in order to develop optimally. The models of the agreement are as follows:

1. There is specific regulation of the factoring agreement, which will guide the community in the development of business, so there is a balance of the legal relationship of the parties and the creation of a justice, expediency and legal certainty.
2. without recourse factoring. The existence of this clause will provide an opportunity for entrepreneurs, especially small and medium enterprises to concentrate more on the promotion and marketing of the product because it is not preoccupied with receivables management.
3. Guarantee of government, so that small and medium businesses can obtain financing through factoring optimally for their business development. On the other hand, the factoring company gained a strong guarantee to provide factoring facilities.
4. Balance the legal relationship of the parties, to realize a justice for the parties
5. No Change of agreement at any time without the client's consent. Agreement is the result of agreement between the parties, so that if there is an agreement should be rechanged between the parties. Thus, there is no arbitrariness of one of the parties.
6. Billing According to legal procedure
7. In accordance with the legal principles of agreement and factoring principles. In this case in accordance with the principles of contract law (principle of consensualism, freedom of contract, *pacta sunt servanda*), values of Pancasila and the 1945 Constitution, the UNIDROIT Principles.

## CONCLUSION

The Implementation of factoring agreements often shows Irregularities / mismatch Philosophical and Juridical. The factoring agreement is an agreement in the form of standard contract, namely the agreement form and content that has been prepared in advance by one of the parties, by the Factoring Company. Client-side only takes or leaves the agreement. If the agreement reviewed it is more emphasized the obligations of clients rather than rights. This shows the imbalance between the legal relationship with the client and Factoring Company.

The difficulties of the implementation are there are no specific rules about factoring agreement, the difficulty to provide collateral, The entire payment is the client responsibility, The lack of clients capability for receivable management, the Clients can only sell receivables to a factoring company.

The Factoring Agreement models in the Future: There is specific regulation of factoring agreement; without recourse factoring, Guarantee from the government, The Balance of legal relationship of the parties, No Change of agreement without the consent of the parties, The debt collection of Factoring company According to legal procedure, no accordance with the legal principles of agreement and factoring principles.

## REFERENCES

- [1] Arief, Barda Nawawi -, 2008, *Kumpulan Seminar Hukum Nasional, ke I-VIII dan Konvensi Hukum Nasional*, Pustaka Magister, Semarang.1994, *Kebijakan Legislatif dalam Penanggulangan Kejahatan dengan pidana penjara*, Badan Penerbit UNDIP, Semarang
- [2] Badriyah, Siti Malikhatun, 2010, *Penemuan Hukum dalam Konteks Pencarian Keadilan*, Badan Penerbit Universitas Diponegoro Semarang.
- [3] Barda Nawawi Arief, 2005, *Pembaharuan Hukum Pidana dalam Perspektif Kajian Perbandingan*, PT Citra Aditya Bakti, Bandung.
- [4] Barda Nawawi Arief, 2008, *Kumpulan Seminar Hukum Nasional, ke I-VIII dan Konvensi Hukum Nasional*, Pustaka Magister, Semarang.
- [5] Bogdan Robert -, dan Steven J. Taylor, 1993, *Kualitatif: Dasar-dasar Penelitian*, Usaha Nasional, Surabaya,
- [6] Coffey, Amanda , 2006, *Reconceptualizing Social Policy: Sociological Perspective on Contemporary Social Policy*, Open University Press, McGraw-Hill Education, Berkshire-England.
- [7] Darmodiharjo , Darji-, dan Shidarta, 1999, *Pokok-pokok Filsafat Hukum, Apa dan Bagaimana Filsafat Hukum Indonesia*, PT. Gramedia Pustaka Utama, Jakarta
- [8] Denzin Norman K. -, dan Y. Vonna S. Lincoln, 1994, *Hand Book of Qualitative Research*, Sage Publication, California.
- [9] Djairan, Karnedi -, 1993, *Lembaga Pembiayaan dan Peranannya dalam Menunjang Kegiatan Dunia Usaha*, Citra Aditya Bakti, Bandung.
- [10] Djumhana, Muhamad, 1996, *Hukum Perbankan di Indonesia*, Cetakan kedua, PT. Citra Aditya Bakti, Bandung.
- [11] Faisal, Sanafiah -, 1990, *Penelitian Kualitatif: Dasar-dasar & Aplikasinya*, Yayasan Asah Asih Asuh, Malang.
- [12] Friedman, Lawrence M-, 2009, *The Legal Sistem Social Perspective* , Diterjemahkan oleh M. Khozim dengan judul *Sistem Hukum Perspektif Ilmu Sosial*, Nusa Media, Bandung, 2009.
- [13] Fuady, Munir , 1995, *Hukum tentang Pembiayaan dalam Teori dan Praktek. (Leasing, Factoring, Modal Ventura, Pembiayaan Konsumen, Kartu Kredit, )* Cetakan Pertama, PT Citra Aditya Bakti, Bandung.
- [14] Ginting, Ramlan, 1993, *Factoring, Pengembangan Perbankan*, Nopember-Desember.
- [15] Gunawan , Ahmad-, dan Mu'amar Ramadhan (Penyunting), , 2006, *Menggagas Hukum Progresif Indonesia*, Pustaka Pelajar, Yogyakarta-IAIN Walisongo, Semarang.
- [16] Hutchinson, Terry -, 2002, *Researching and Writing in Law*, Piramont-NSW.
- [17] *Ilmu Hukum: Pencarian, Pembebasan dan Pencerahan* (Editor Khudzaifah Dimiyati), Muhammadiyah University Press, Surakarta 2004,
- [18] Jenie, Siti Ismijati , 1996, , *Beberapa Perjanjian Yang Berkenaan Dengan Kegiatan Pembiayaan*, Penataran Dosen hukum Perdata, Diselenggarakan Fakultas Hukum Universitas Gadjah Mada, Yogyakarta.
- [19] Kitab Undang-undang Hukum Perdata.
- [20] Marzuki , Peter Mahmud ,- 2005, *Penelitian Hukum*, Kencana, Jakarta.
- [21] Menski, Werner -, , 2006 *Comparative Law in A Global Context, The Legal Systems of Asia and Africa*, Second Edition, United Kingdom: Cambridge University Press.
- [22] Miles Matthew B. -, and A. Michael Huberman, 1992, *Analisis Data Kualitatif*, UI Press, Jakarta.
- [23] Moleong, Lexy 1996, *Metodology Penelitian Kualitatif*, Remaja Rosdakarya, Bandung.
- [24] Muslih, 2004, Mohammad-, *Filsafat Ilmu Kajian atas Asumsi Dasar , Paradigma dan Kerangka Teori Ilmu Pengetahuan*, [www.pmiub.files.wordpress.com](http://www.pmiub.files.wordpress.com).
- [25] Nasution, 1992, *Metode Penelitian Naturalistik Kualitatif*, Tarsito, Bandung.
- [26] Nonet , Philippe-, dan Philippe Selznik dalam A.A.G. Peters, Kusriani, 1989, *Hukum dan Perkembangan Sosial*. Buku Teks Sosiologi Hukum, Buku III , Pustaka Sinar Harapan.
- [27] Pancasila
- [28] Perpres No. 9 Tahun 2009 tentang Lembaga Pembiayaan.
- [29] Rahardjo, Satjipto 2008, "Membedah Hukum Progresif", Penerbit Buku Kompas, Jakarta
- [30] Robert K. Yin, *Studi Kasus, Desain dan Metode*, PT Radja Grafindo, Jakarta.
- [31] Siamat, Dahlan-, 1995, *Manajemen Lembaga Keuangan*. Intermedia, Jakarta
- [32] Simanjuntak, Emmy Pangaribuan-, 1994, *Lembaga Pembiayaan.*, FH. Universitas Gadjah Mada, Yogyakarta. 1994, "*Lembaga Pembiayaan*", Fakultas Hukum Universitas Gadjah Mada, Yogyakarta.

- [33] Strauss and J. Corbin, Busir, 1990, *Qualitative Research; Grounded Theory Procedure and Techniques*, London, Sage Publication.
- [34] Sudarto, 2002, *Metode Penelitian Filsafat*, Raja Grafindo, Jakarta.
- [35] Sutopo, HB , 1990, *Metodologi Penelitian Kualitatif Bagian II*, Universitas Negeri Sebelasmaret Press, surakarta, HB Sutopo, 1990, *Metodologi Penelitian Kualitatif Bagian II*, Universitas Negeri Sebelasmaret Press, Surakarta.
- [36] Tedjosaputra, Liliana, 1995, *Tinjauan Yuridis Factoring (Anjak Piutang) Sebagai Lembaga Pembiayaan*, Penataran Dosen Hukum Perdata Perguruan Tinggi Seluruh Indonesia, Fakultas Hukum UNTAG, Semarang.
- [37] Undang-undang Dasar 1945
- [38] Wignjosoebroto, Soetandyo *Hukum, Paradigma, Metode dan Dinamika Masalahnya*, ELSAM dan HUMA, Jakarta, 2002 , hlm. 104.

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## The Empowerment Program for Villages Economy Improvement Through Alleviating the Law of Littercys of the Coastal Community Pati Regency Central Java Province –Indonesia

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### Abstract

Pati Regency is a coastal region lies in the East-North of Central Java province. Most of the people are occupied as a small-scalers in fisheries and agriculture sectors. Based on Indonesia regulation No. 6 year 2014 re: Village, it is mentioned that for the purpose of business, thus village corporate board (called as Badan Usaha Milik Desa or BUMDES) could be operated as a business and/ or public services units in the respective village. However Bumdes establishment is required for a legal status by law. In facts, the regulation said that people or group or party in the village could not run a unit business or public services whenever they have not performed with legal status registered in the respective Local Government. Furthermore, those group or party is not eligible to manage or even to apply any kinds of grants from the government to expense their activities. It is indeed need to alleviate the illiteracy of law or regulation of people, especially for encouraging the establishment of village corporate board to improve the entrepreneurship of people in the targetted villages in the study area. This study mainly aims to outline a strategy to empower people in a smaller group target to upgrade their literacy to the related regulations and/ or laws in order to manage their enterpreneurships' activity in the village. The Socio-legal research is applied in this study combined with mixed methods analysis of quantitative and qualitative accordingly. The results revealed that people are likely enthusiastic to reduce their illitercy and keen on to learn how to improve their indigenous enterpreneurship in running their business with formal regulation and/ or law polishment as a legal entity.

**Keywords:** law, illiteracy, village, people, empowerment, Indonesia

### Research Background

In the last decade, the paradigm of rural development in Indonesia has undergone shifts and changes, such as their basic awareness that resulted in the advancement and improvement of society in the determination on the development insight in general and economics in particular. Development was carried out largely to the structure closest to the community, i.e. the village, which has an important role in supporting the success of the national government at large. Village is a community unit which has the original order based on rights origins that are special.

The rationale in the Village Administration is diversity, participation, original autonomy, democratization and community empowerment (HAW Widjaja, 2003) in other words, the village has the authority to regulate and manage the society, as the village and administrative units that deal directly with the public, so that the position of a village in the implementation of development is very important.

The enactment of Law No. 6 of 2014 concerning Villages has brought new hope for rural communities in general. The village which has been overlooked in full, with the promulgation of Law Village will soon be lifted in order for better prosperity as the condition of the advance of urban, because the village was given the authority to regulate and manage the wealth of the village through the establishment of Village owned enterprises ( BUMDes ), as set out in Article 1, item 6 Act 6 of 2014 about the Village. The establishment of Village Owned Enterprises ( BUMDes ) is the realization of productive

economic management of villages conducted cooperatively , participatorily, emancipatorily, in transparency, accountably, and sustainably.

An important point related to the Rural Finance it has sources of income, the greatest value is derived from the State Budget (APBN), the rest comes from the Regional Budget ( APBD ) and revenue of the villages (Article 72 paragraph (1) and (2) of the Act 14 Th . 2015). The sources of these funds are fully utilized with good management, so that the value of the resulting growth is largely determined by the level of productivity of the use of village funds. Until now the potential institution is still not fully utilized by the public.

Indonesia is an archipelago that two-thirds of its area is water , the most population livelihood from agriculture and fisheries, which is still traditional and has the characteristics of mutual kinship. The existence of the village with its natural resources has been utilized to increase the rural income, which are directly related to agriculture, fisheries, creative economic products and other products according to the characteristics of their villages.

The largest area of Indonesia is a rural area, the abovementioned conditions reflect the lives of villagers (Irzal Effendi, et al, 2006).

Currently in Central Java, especially on the north coast of Java in Pati has grown in aquaculture the mainstay of coastal society i.e activities related to fisheries, including producing fish, either through capture, as well as aquaculture and or fish process to meet human needs of food as a source of protein. For people who live in large area of land they have developed agriculture and farming supported by the fertile land, and managed independently the developing agriculture.

Fisheries business in Indonesia consists of aquaculture fishermen, processing of fishery products, and all businesses involved in supporting fisheries, such as the food industry, fish seed, fuel, fishing gear for fisheries capture, aquaculture, fish processing, pharmaceuticals, as well as boats for fisheries (Irzal Effendi et al, 2006).

The business activities of the fishery commodities and other processing products as well as other supporting goods and services refer to fishery agribusinesses. The fishing business activities are always profit oriented. The supporting aspects of fisheries to increase coastal people's income are supported by capital, coastal natural resources that have a lot of fish, human resources, production management and marketing.

Most fisheries business has no adequate capital yet, so they do not have their own ship as the main capital in searching fish, so that it does not support fish capture in Pati. Aquaculture production is still constrained by our capital. The expertise of the entrepreneurs are not adequate as the majority of low-educated people, because they can not manage the business well.

Entrepreneurs are people who hold a fishing business that still largely establish joint venture as a community to engage in fisheries. In particular, mostly are small and medium businesses (SMEs) (Etty Susilowati, 2015). The formal business that has been registered in the Trade Department of Commerce Business owned by individuals and the Fishery Association.

In the Government programs that improve the welfare of rural communities, in terms of the Financial village has sources of income, the greatest value is derived from the State Budget (APBN), the rest comes from the Regional budget (APBD) and the revenue of the village. The sources of funds are fully utilized with good management, so that the value of the resulting growth is largely determined by the level of productivity of the use of village funds.

The purpose of this study is to examine and analyze the efforts of the regional government in empowering rural communities to manage fishery commodities, to improve the economy of the fishing communities of coastal areas Pati, Central Java.

## II. Methodology

This research uses the *Social Legal Research* approach that examines secondary and primary data in the field. The research aims to determine the effectiveness of the law in reality and find a solution. The analysis of the research data was done by qualitative method, which collects data as much as possible from the research literature and spot research. The data was analyzed by the inductive method, and compiled systematically.

### III. Framework

The long journey of the history of the village in Indonesia today has brought a fundamental change in the Indonesian state structure construction. The village has grown to such an extent that needs to be protected, and empowered in order to progress in all fields, so the village is currently strong, independent and democratic.

Development paradigm requires a change of development orientation towards economic growth in alternative development with an emphasis on participation and empowerment of the community.

The development paradigm shift is to develop and implement community development model that can be accepted by the public at large (acceptable), to community development model that can be applied or implemented. (Implementable).

A paradigm shift addressed include:

- The purpose of the development towards the equity and balance in harmony is the people's choice between the economic growth and the equitable distribution as a collective agreement.
- To change the success of macro development into regional approaches by taking into account the local wisdom.
- Shift to drive the dominant role of the government into the development approach that involves the wider community.

The context of sustainable development of rural areas has very important and strategic position. The major economic activities in rural areas including mountain areas of agriculture, plantations whereas people in coastal region are seeking fish and aquaculture. Empowering the fisheries sector is an effort to increase the potential and capacity in the fisheries sector which will add value to the wider community.

The local government is given authority through decentralization to manage his own region by potential and local wisdom of each region and given autonomy as much as possible to take care of all of government administration outside of the central government to make a policy area associated with the enhancement of the customer service and community empowerment, and real autonomy and responsibility.

The rural development is carried out from, by and for the people with the help of the government, so that there is an obligation between the local government and communities equally.

The establishment of Act 6 of 2014 concerning Villages, Villages providing the opportunity to establish a Village-Owned Enterprises (BUMDes) which aims to utilize all the potential economic, institutional, as well as other potential possessed by the village which is an agency or institution which can run economic enterprises that provide public services in a spirit of mutual kinship.

The mechanism of the rural development is a collaboration with a harmonious government activities, and the participation of society, even the rural development is done by the community itself, while the government provides guidance, direction, support, direct supervision, and coordination to dig up the people ability to improve their life and economic security, as well as the community development based on the empowerment and strategies as the main approach.

Empowerment defined by Wilkinson:

"Empowerment means providing people with the resources, opportunities, knowledge and skills to increase of reviews their capacity to determine reviews their own futures, and to participate and affect the life of reviews their community".

Wilkinson interpreted the development as empowering more natural development process, namely the formulation of the problem and the solution turned over to the community, to be able to give satisfaction to the community. The community empowerment is to provide benefits to the environment, which will enhance the potential of its resources to provide economic value to rural communities.

## IV. RESULTS AND DISCUSSION

### IVA. Empowerment On Fisheries Sector in Enhancing Economic Community

In achieving the welfare, it is necessary to have a policy that provides access and opportunities for rural communities to drive the rural economy by exploring the potential of natural resources and human resources of the village that will be used as a source of rural income. Villagers who still uphold the nature of kinship heading in the direction of rural development for the future is the expansion of employment opportunities and economic diversification in rural areas to support the revitalization of agriculture, fisheries, forestry, and rural development.

An important point related to the rural economy contained in the Act no.6 Th. 2014, Article 72 paragraph (1) and (2) of the Financial village has sources of income, the greatest value is derived from the State Budget (APBN), the rest comes from the Regional (APBD ) and the revenue village. In order to increase rural communities that received funding of about 1, 4 (one point four) billion Rupiah, every village builds infrastructure and manages the resources owned by the village in order to improve the rural economy.

The policy can be realized by the establishment of economic institutions managed entirely by the villagers. Established on the basis of Government Regulation it is also based on the initiation of the villagers who came from their economic potential, natural resources (NR) and human resources (HR), and should be managed appropriately and independently.

According to Ono Taryono, empowerment of agriculture and fisheries sector for rural development can be conducted through: first, the change of the agriculture / fisheries to develop optimally (enabling), encourage, motivate and raise awareness that agriculture / fisheries has the potential to develop and profitable. Second, strengthening the potential and power possessed in agricultural sector to become independent and sustainable by providing a variety of input and opens up various opportunities to deliver agricultural / fishery to be stronger. Third, protection of the structural barriers and unfair competition (Ono Taryono, 2007).

The institutional existence of a village, formal judicial confirmed in a decree issued by the government of the village, but not at the village government structure. It is to avoid the intervention of their own personal or group interest. So it is not controlled by certain groups with big capital in the countryside, then the ownership of the institutions should be controlled together where the main goal is to improve the economic standards of rural communities (Ety Susilowati, 2015).

Until now, Pati still can not develop, because it is constrained by legalities. Legality completeness is needed to disburse funds provided by the state, that every village receives 1.4 (one point four) billion Rupiah.

The difficulties or obstacles are to fulfill legal compliance business , especially the legality of shape, caused by uncertainty regarding the legality of the arrangement in the form of legislation about the village. Law No. 6 Th. Article 2014 of the Village. stipulates that Village Owned Enterprises ( BUMDES) should be a legal entity, while Village Ministerial Regulation No 4 of 2015

The existing conditions resulted in the establishment of Village Owned Enterprise ( BUMDES ) through village regulations that havenot been set on the legality of forms of business, they generally refer to the Village Ministerial Regulation . It is one of the obstacles in the process of establishing Village Owned Enterprises ( BUMDes.)

Village Ministerial Regulation No 4 of 2015 set also on the possibility BUMDes for petitioned to go bankrupt, it's just not regulated in details . Therefore the regulation on insolvency (BUMDes) based on Law 37 of 2004 on Bankruptcy and PKPU (Suspension of Debt payments) can not be implemented.

Bankruptcy is a way of debt accomplishment to debtors who have at least one of the two creditors and the debt is due and collectible. The individual company or partnership either incorporated or non-legal entity can be declared as bankruptcy. The legality of the company to determine who can be debtors that is declared bankrupt, thus the certainty of the legality of the corporate form is needed in Village Owned Enterprises (BUMDes) , so Village Owned Enterprises ( BUMDes) can be one form of company that can be accepted by the community as business partnership, to achieve the purpose BUMDes is using its economic potential, institutional, and other potential possessed by the village for public.

In coastal areas Pati , the empowerment in fisheries sector are :

- To encourage the expansion of economic activity, non-agricultural, which strengthen the fisheries sector, the fishing industry and its supporting services.
- To increase the capacity and the empowerment of rural communities, to capture local economic development opportunities, according to the northern coastal areas, that the major income is from fishing activities.
- To improve infrastructure evenly for the marketing activities of fisheries.

This policy is being enforced, but still not familiar in the community of the village institutions.

#### **IV. B. Traditional Fisheries Activities in Coastal Region , Pati**

The population and economic growth in Indonesia has prompted the increasing demand for fishery commodities from time to time. The fish demand will be met from the limited resources of fish. The tendency of increasing demand for fish has opened opportunities of the rapid growth of the fishing industry, both captured fisheries and aquaculture.

Settings on the fishery business, set forth in Article 25, s / d Article 45 of Law Number 31 of 2004 updated by Act Number 45 of 2009 on Fisheries. There are three types of business in fisheries namely:

1. Captured Fishery Enterprises.
2. Aquaculture Enterprises.
3. Fishery Processing.

Each type of business has its own production operational characteristics that will directly influence the emergence of various types of costs.

25 (1) of the Law of the Republic of Indonesia Number 45 of 2009 on changes to cope Act Number 31 of 2004 on Fisheries. It says :

"Fisheries Business system implemented in the fishing business includes pre-production, production, processing and marketing"

Fishing business is divided into four (4) aspects, namely: pre-production, production, processing and marketing.

Fishery processing business is a business activity aims to improve fishing for added value of fishery products, both from the business captured fisheries and aquaculture business, the business activity aims to bring fishery products to wider market.

By its nature, the general cost of business consists of three types, namely: investment costs, fixed costs and variable costs. As for other forms of expenditure contained in the three types of fishery business:

##### **1. Captured Fishing Business**

The captured fishery business is an activity that focuses on producing fish by catching fish from inland waters (rivers, estuaries, lakes, reservoirs and swamps) or from marine waters (coastal and high seas), for example:

The catching tuna , pomfret sea and others.

The Cost includes :

a. Investment cost includes procurement:

- 1) ship or boat
- 2) machinery
- 3) fishing gear
- 4) capture tools.

b. Fixed cost includes:

- 1) Development of Fisheries Business License (SIUP); 2) Making Blue Pass.
- 2) The cost of ship / boat maintenance , machineries, fishing gear, the capture tools; depreciation cost .

c. Variable Cost includes:

- 1) The cost of purchasing Oil / Fuel; 2) the purchase of supplies on the sea -ice cubes 3) levy auction 4) the income share
- 5) The business of Aquaculture

2 Fisheries business or aquaculture is an business that aims to produce fish in a container that is maintained and controlled and profit-oriented. Example: catfish, carp, tilapia, catfish, etc.

Costs to be incurred include:

- a. The investment costs, including: - the cost of land acquisition; -The cost of pond construction;
  - Procurement Pumps; -Procurement fishing tools, nets; Procurement generator.
- b. Fixed cost , include: -Making License; -Making Blue Pass ; -Cost of pool maintenance , -Pump and capture tools .- Depreciation cost.
- c. Variable cost include: - the purchase of seed; -The purchase of fish food ; -The purchase of fertilizers, lime, pharmaceuticals.-The cost of harvest.

### 3. Fisheries Processing Business

Processing fisheries business is a business activity to increase the added value of fishery products, originating from the business of fisheries and aquaculture business . In addition the business activity also aims to bring fishery products to wider the market. Example:

the manufacture of fish nuggets, fish balls, fish crackers, etc.

Cost includes :

- a. The investment costs includes : procurement of land, construction, fish processing aids.
- b. The fixed costs includes : Making the Business License (License), Maintenance of buildings, wage labor, depreciation costs.
- c. Variable Costs: The cost of purchasing raw materials such as fish, oil purchases, purchases of water, salt purchases, daily wage labor.

In conducting the fishing business known as a small fishing (traditional) and modern fishermen (fishermen in the form of Enterprises with Large capital ) fishing boats and fishing gear of course affect the results of fish catch.

Small fishermen are those who work daily to fish for the needs of everyday life, using fishing boats with most 5 Gross Tonnes (GT), because the relationship of fishermen with boats are very close, as they relate to the size and the type of the vessel whether it is an individual vessel or it belongs to the company that is strongly associated with licensing or permissions of fishing business.

Fishing business is divided into three (3) categories: Small, Medium and Large. The development of the three industries require big capital (investment and working capital).

The business activities of small scale fishing (traditional) also face a lot of problems, including:

First: The problem of marketing of fishery products, fish easy to damage, they are not long lasting so that small businesses are always in a precarious position.

Second: Production problems in the fishing business is more difficult to predict, the success rate is highly dependent on external factors such as season (climate) or internal factors include the limitations of the technology, facilities, infrastructure and capital.

Third: Financial issues and capital / capital resources obtained from fishing groups or associations of fishermen who sell the fish capture to collectors / owners of the ship become a dependency, because to obtain investment the ship owner is obliged to provide funds to meet the need of fishermen in transition due to climate change.

Risks for small fishermen:

The business activities of small scale fishing or traditional has irregular result. This is often the reason for financial institutions not to give guarantee / loan capital, where the financial institution sets forth the terms of the collateral high and difficult to meet the entrepreneurs of small scale fishing. Therefore the activities of fishing business will be bound by the regulations / legislation Enterprises, Law on Foreign Investment, where Fishery conducting the catch operations area also depends on the flag ship, fishing grounds, other regulations.

#### **IV.C. Traditional Fishery Enterprises in the coastal region Pati.**

The traditional fish processing business in Pati conducted by fishermen together with their relatives along the beach in coastal sites with processing methods inherited. The traditional characteristic of processing is the type, the quality of various raw materials affected by its environmental conditions. The process and the procedure are always different according to the place, the individual. The state is more dependent on nature so that the products are not the same quantitatively and qualitatively.

The size of the vessel will determine the fishing gear and fishing area as well as the number of the result of fish catch, because the operational costs of fishing will be affected by the size of the ship, the span to the location of fishing (fishing ground), the amount of time needed as well as the size of the expenses for fish preservation, the cost of supplies and other expenses.

According to the FAO terminology, traditionally processed fish "Cured FISH" is a product that is processed in a domestic industry. The types of process includes traditional processing products namely : smoked fish, fermented products such as soy sauce, peda, fish paste, where the product is also obtained in Asia, Africa and even Europe (UK, Norway, Poland).

In the small town of PATI, to accommodate the domestic fish production, they have a modern fish processing products with the clotting process (coolstorage), which has a variety of fish species and sizes that are much available matches the industry's capacity. The establishment of PT Putra Leo Nusantara, a company that holds fishery products derived from households that are familiar and has mutual help can accommodate 90% of the fleet of boats / vessels for fishing, where fishermen who earn fish capture the slightest got facilities of preservation, storage and transportation for fish that is possible to be sent to processing factories.

Such conditions provide opportunities to be developed, due to the availability of fish resources and high demand, the number of domestic industries and simple technologies, the traditional processing needs to get to the legality of establishment of legal protection.

In the development at the initial stage, the domestic industry is a small industry that has the following characteristics:

1. The residence and place of work is in one residential building;
2. All working the management, implementation, production and sales are done by the members of one family.
3. Capital used in industrial activities mixed with household money needed to spend day-to-day livelihood;

4. Informal jobs without permission from the government, so the work was not subject to the regulations of State / Government;
5. The profit and loss of the business is difficult to define as the production capital is always mixed with the money for the household

In the next phase there is already physical separation between a house for shelter and buildings to work, though it is still in the same yard. Likewise, between the family and working groups, the working capital and the money for household, has no separation and is not always noticed by small entrepreneurs.

The development of the small industry in general, the company grew from a privately owned or owned by a few people, as generally owner-manager or owner is a company leader who is assisted by several permanent and or seasonal helpers.

The development of forms of fishing business from the production of fishermen household is still traditional and familiar has mutual aid isto end the problems of traditional fishermen in developing his venture into bigger business entities and has legality to provide protection in the acquisition of Capital Guarantee to increase welfare.

## V. Conclusion

- In rural Indonesia, in order to utilize all the potential economic, institutional, as well as other potential possessed by the village is for public welfare. The majority of Fishing business in coastal communities Pati is conducted by small fishermen having traditional fisheries business activities with a small capital and simple tools, the character of kinship and mutual assistance which has the same goal of improving the economy of coastal communities. It is necessary to obtain legal protection through legal entities owned businesses in order to develop and improve the economy of coastal communities in the fisheries sector.

- In coastal areas Pati, the empowerment of local government development in fisheries in particular.

- Encouraging the expansion of economic activity, non-agricultural, which strengthen the fisheries sector, the fishing industry and its supporting services.

- Increase the capacity and empower the rural communities, to capture local economic development opportunities, according to the northern coastal areas, mostly as a major income from fishing activities.

- Improve infrastructure evenly for the marketing activities of fisheries.

## References

- [1] Amiek Soemarmi, Sengketa Nelayan dalam penggunaan Alat Tangkap Perikanan (Studi Kasus Berlakunya Peraturan Menteri Kelautan dan Perikanan Nomer 2 Tahun 2015 tentang Larangan Penggunaan Alat Tangkap), hasil penelitian, dengan biaya DIPA/PNBP Tahun Anggaran 2015.
- [2] Ety Susilowati, *Dari Lembaga Ekonomi Desa Menuju Badan Usaha Milik Desa*, 2015.
- [3] H.A.W Widjaja, *Otonomi Daerah: Merupakan Otonomi yang Asli, Bulat dan Utuh*, (Jakarta: PT. RajaGrafindo Persada, 2003).
- [4] Irzal Effendi dan Wawan Oktariza, *Manajemen Agribisnis Perikanan*, Penebar Swadaya, 2006.
- [5] Siti Mahmudah, Tinjauan Yuridis Terhadap Kerjasama Pola Subkontrak pada Industri Kecil, 2008, Thesis, Program Kajian Hukum Ekonomi dan Teknologi, Program PascaSarjana Ilmu Hukum, Universitas Diponegoro, Semarang.

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## Notion of Strategic Control

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### Abstract

With strategic control, we understand the special type of strategic control which is aimed to monitoring and evaluation of strategic management process in order to ensure its functioning and progress. In fact, the strategic control is applied to ensure if all the planned results are accomplished during the process of strategic management. The basic purpose of strategic control is to assist senior management in achieving the objectives of the enterprise with the assistance of monitoring and evaluation of strategic management in general, and particularly in the implementation of the selected strategy. Relying on the preliminary explanation, the results of the assessments are reflected in the strategic management of the enterprise environment, the establishment of vision, mission and goals of the strategy and the conversion of strategy into shares. Strategic control in this case appears as a reverse link that provides feedback to determine whether all stages of the process of strategic management and how they function have been implemented in harmony.

**Keywords:** Notion of Strategic Control

### Introduction

The stages of strategic control are closely linked among themselves while comprising a compacted integrity, in which each of these stages is of uniform significance and therefore with an equal impact on the success of the entire control system. Therefore, upon the designing process of this system in current terms, to each of these respective organizational stages an appropriate responsibility should be given, regardless of the fact that some of these steps will be shaped easier and some more difficult. In other words, the duration of the configuration of any phase of the process and the complexity of its processing must not affect the favouring, i.e. their discrimination, while taking into account that the success of the control system depends on the success of each stage of this system.

In the context of reviewing the model of strategic management process it is clear that control and evaluation give the feedback of the entire model. The emitted information through this itinerary are the outcome of the current collected performance measurements. If any avoidance occurs between the achieved standards and performance, then operational managers need to know how, in what way they can correct the activities of the employees. In this case the involvement of senior management is not necessary. However, if such deviations result of the standards themselves, both, senior management as well as other management levels needs to know how to develop new programs and implementation procedures. In other words, high levels of management need to establish new standards of performance that will be in harmony with existing circumstances.

### Process of control and its features

#### Determination of measuring sizes

Determining of the measuring size means to measure what should be the starting point in shaping the control system. In other words, management must demonstrate what it wants to measure, i.e. what are the processes and outcomes, by measuring the accomplishment of which is understandable that a company is making its own strategy. The ability to solve these processes and results constitutes one of the basic skills of managers. Related to this following questions should be made:

1. What processes and results represent the best the intentions of the responsibility scope of the respective manager?
2. What is the failure of the responsibility goals of the respective manager manifested with?

3. What is the best measure of critical accomplishment deviation from the goal?
4. In what way it can be learned who is responsible for the respective error?
5. Which indicators of goals development will cause the least cost?
6. For which indicators can be obtained information in economic terms?

Resolved processes and results should be measured through appropriate measurement and in rational way. Thus, the most important elements of the process are placed in the centre and the elements that have the greatest impact on costs or those that cause the biggest problems in the enterprise.

When defining the performance of the goals, which will be measured in the process control, it is usually initiated by the aspirations of all stakeholders, such as owners, managers, employees, buyers, suppliers, banks, government and others.

### Setting of standards

Standards represent the size of goals by which is compared the current or expected effects (performance). In this sense, the standards are represented as measures or criteria under which it estimated the accomplishment of the goals and tasks of individuals, workgroups, and organizing units and the enterprise as a whole. If the standards are set properly, from the early development process of any activity they signal that this process is being developed within or outside the planned framework. In this case they also signal the manager to take certain actions, which will return the process of such planned framework, in cases when deviations are outside the limits of tolerance.

Standards can be of quantitative and qualitative character; the first ones are measurable, while the latter ones are appreciated.

Quantitative standards usually appear as physical (neutral) and valuable standards, whereas, quality standards appear as descriptive, programmatic and targeting.

Physical standards are neutral sizes presented in absolute or relative way - kilograms, tons, meters, ton- kilometres hours according to tons hours, according to the production unit, etc.<sup>1</sup>

Standards with valuable are absolute or relative sizes presented in currency, and deal with expenses, (direct and indirect, special and general), expenses, incomes (general and specific), then capital (rate of return, the ratio between net debt and the ratio of the following assets and subsequent debt, etc.).

Descriptive standards deal with such measures which may be presented in a quantitative way. This primarily has to do with the features, activities and processes which can be evaluated later.

Program standards are of such nature that some activities from a certain program (eg program of new product acquisition), or even the whole program is treated as a standard.

Aimed standards are issued from set goals and deal with those purposes that are not of quantitative character (eg increase the level of knowledge or ability, creating better working brightness).

Each of these standards will be applied in this case depends on the type of activity which is developed by the manager. In an enterprise, according to the set rules all types mentioned standards will be used.

### Measurement of current performance

Measurement of current performance a procedure in which is determined if the set standards have been accomplished and to what degree they have been accomplished, then the reasons are determined why possible deviations have happened to achieve the same, it is necessary to provide the relevant information regarding what has been accomplished and has failed to accomplish in terms of the enterprise as a whole, the said information has to deal with the marketing and sales, production, supply and stocks of materials, capacities, defects and maintenance, workforce, involved capital and the success of the business. Collection and processing of this information can be performed by the manager himself,

<sup>1</sup> Compare: Weichrich, Koontz, H. Op. cit. page 581

appropriate service which is relevant to the manager or a separate service outside the jurisdiction of the relevant manager information systems based on electronic computers that are designed for these purposes (EIS, MIS)T are particularly effective.

To ensure the effectiveness of performance of measurement, collection and processing of information must have a certain dynamic-certain information will be collected during the day, others within a week or 10 days, some within a month, and some even within 3 months, half a year or a year. Processing of such information is done in a way to be comparable with set standards, in order to make the possible deviation visible.

In terms of the possibility of influencing the accomplished results if possible, it is the best that during their period of their accomplishment to collect information about deviations in order to act preventively. More often here we have to deal with the costs and expenses that about to be made for any final accomplishment. In this case the standards are set for each part of the final performance, so the implementation process signals that are part of this implementation present avoidance of costs and expenses, in order to take preventive actions prior to the end of the whole process. On the analogue way the measurement of performance is set with respect to the implementation of the investment program, implementation of which is followed according to the stages of development.

### **Comparison of current performance standards**

Comparison of performance and standards is a procedure in which a comparison of different data on these performances and performance standards is done. The purpose of this comparison is to determine:

1. Avoidance of performance standards,
2. The sizes of deviations from standards,
3. The causes of deviations from standards.

In cases where the current performances sizes are within the desired tolerance, measurement process stops here. However, if the deviations are outside the tolerance limits, it is necessary to first prove their pre-signals. In this way, we should note that avoidance from standards can be negative and positive. Not only negative avoidance signal for action, but action signals can be both positive deviations, thus any avoidance from standards must be subjected to detailed analysis. This analysis should also provide answers to the question of why the avoidance has happened –was it conditioned to the subjective or objective reasons.

As the comparison of performance standards with determining of the size and direction itself (pre-signal) avoidance can be performed automatically, the determining of the avoiding cause is a matter of special analysis. Such analysis, in certain cases is carried out by the manager, whereas in other cases, they should be carried out by a special team of experts. It can be said that at the operational level the standards are usually of common size, and therefore the caused avoidance can be verified more easily. Despite this, at the strategic level the standards comprise complex accomplished s sizes that are subjected to numerous influenced factors. Therefore, the determination of the causes of avoidance in such cases is a complicated process which requires long and detailed analysis.

### **Evaluation of performance and corrective actions**

Evaluation of performance means analytical and diagnostic means of the manager's ability, regardless whether if it develops the analysis of the causes of avoidance or is carried out by specialized service. Without this ability the manager would be handicapped upon decision-taking on actions that should be taken to eliminate or soften such avoidance. Most often three following aspects of these actions are distinguished:

1. Maintaining of the status quo
2. Correction of avoidance
3. Change of standards

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The maintaining of the status quo is recommended in cases where deviations from the standards are so small and it's not worth to undertake any actions that would ensure the implementation of standards. However, when the avoidances are large, then the correction of avoidance is indispensable. If such actions aren't taken than major disturbances will take place in the enterprise business. What corrections will be taken depends on the causes that have contributed to the avoidances from the set standards, and it is determined by analysis. Considering it from the functional point of view, such causes can be identified in planning, organizing, and management of human resources –i.e. with functions of management<sup>1</sup> that precedes the control. This means that corrections can be made in the plans and purposes, organizing and determination of the staff and the style of leadership itself. This shows that the control is not only an integral feature of the management of the main action, but also retroactive for all previous functions.

The change of standards is usually a consequence as they are unrealistically set, too high or too low. Very high set standards, are usually diagnosed when with those whom we have to do, they are not capable to accomplish. In contrast, very low set standards are diagnosed when most are implemented very easily but fail too high.

All this indicates that the evaluation of performance in selection of appropriate management action is fair.

### **Types of control systems**

The enterprise acts (operates) in certain environments and by its existence depends upon its reception. Therefore, it must control how the environment reacts to its outputs. On this occasion we constantly have to bear in mind such outputs are the result of the internal operation of the company (the process of transformation or conversion), therefore, from such an action depends the solvency of outputs, and that means its acceptance them from the environment. All this shows that the determining of the success of the chosen strategy should control two basic sets of performance—a group comprised of performances of which mediation the company defines its accession (corrections) in the environment, whereas the other group consists of performances that define the ability of the enterprise for acceptance. Therefore, there are two basic types of control system:

1. Out-organized system control,
2. Organizational system control.

That both systems present a reality of each enterprise - the fundamental question is how are they formed and implemented. In this case we must consider that the control systems are very expensive, but they are often the only means of the enterprise to monitor and evaluate the performance in cases when organizational activities are complex.

### **Out-organizational system control**

As the name itself indicates, this control system is operating outside the enterprise, and is comprised of market mechanisms that through the action of the offer and demand shows if the enterprise has been accepted and to what extension of the environment. This mechanism is most commonly called market control; implemented through the establishment of a system of prices, followed by mediation and the performance of the enterprise is evaluated. This is the objective of the control outputs. It is possible only when the enterprise is able to impose objective financial measures of performance.

There are three general forms of market control:

1. The market price of shares
2. The rate of return of capital,
3. Transfer of prices.

Out-organizational system control can work out successfully only if an adequate system of comparison is set In this case the system of comparison should first of practices should include the so-called special comparison, which means individual comparison of enterprise with competitors, in groups or branch of the activity.

**The market price of the share.** The share price is a performance measure of the company considering that it is the result of supply and demand in the market of capital. The changes imply reaction of the actors-starting from stock owners,

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<sup>1</sup> Griffin, W. R. , Management, 3rd Edition, Houghton Mifflin Company, Boston, 1990, page 606.

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managers of enterprises and to a range of external stakeholders-suppliers, buyers, banks, governments, etc. However, considering that we are dealing here with controlling the implementation of the chosen strategy of the enterprise, these implications are primarily related with the management of the company, which should adapt its behaviour to such changes. In fact, if the share prices have risen compared to their nominal value, this is a sign that management has chosen a real strategy, so it will still enjoy the support of shareholders. Otherwise, if the stock prices have fallen below the nominal value, this may be a sign that management hasn't chosen the true strategy; therefore, it will lose the support of shareholders. Particular sensibility of management occurs when the changes in stock prices reflect the level of management compensation. This happens not only when a part of the management of share profits is paid, but particularly when applying the system of values of options. This is such a form of compensation which is paid to the managers in shares under a fixed price, which in most cases is equal to their market price on the day of admission. Options are usually allowed primarily, and then later are allowed the General Assembly. Stimulating character of these options is whether the difference between the prices according to which the share is estimated for managers and the real price that will be achieved for such shares in the capital market, presents a motivation of successful enterprise business. Thus, in this case for managers it is very important that they choose and implement the strategy that will ensure continuous growth as the value stock, but it is a strategy that ensures the success of enterprise business.

### **The rate of capital return**

This indicator shows the ability of the enterprise to the set deadline to return the capital to the investors. In this case the invested capital can be understood as the invested capital and used capital (total equity and long-term total shareholder) from which derive other different indicators such as, ROI, ROCE, ROA.

It is understandable that each strategy will not be equally successful – the more successful the strategy will be the strategy that provides the fastest return of the invested material. In other words, if the management has chosen <sup>1</sup>a strategy that within a short period has enabled the return of their capital, this strategy is successful. For this reason, the height of the rate of return on the invested capital is the best indicator of the speed of this conversion and thus the success of the chosen strategy.

It should be noted that the rate of return of the capital is not only a measure of the performance of the enterprise, but it is also a measure of performance units of the divisions. In fact, even when the rate would to be used in comparison with the same enterprise or different groups and their subsidiaries, it will in deal the same way with comparisons to the same inter-divisional enterprise. Thus, this is a very important measure of the performance of the enterprise and once the key control of the mechanism to the success of the chosen strategy.

### **Transfer prices**

In multi-divisional enterprise, where relatively autonomous parts operate undertaking, (profit centres, business units, and strategic business units) the overall quality performance is expressed in the quality of each of these parts. Thus, the fundamental issue is how in the system of price as a mechanism of control that is outside of these parts, can control, check and evaluate the performance of the said parts. What we are dealing here with is the choosing of such price strategy in exchange with inter-divisional, which shall ensure the success of the enterprise as a whole. In this sense it is possible to distinguish two types of transfer prices - established market prices and established expendable prices.

The prices established in the market are those transfer prices in exchange with inter-divisional, which are determined based on market prices of internal transferred premises and these most often they are the prices of full market prices adjusted to market prices or contracted in basis of the market price.

Based expendable prices are in exchange with inter-divisional transfer prices which are determined based on the costs of internal transfer premises and these are mostly full costs, variable costs or fully increased costs.

Each of the mentioned systems of the price has its advantages and disadvantages, requiring a strengthened analysis of all the factors that affect their resolution. Therefore, it is great responsibility of management that within the overall strategy to

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<sup>1</sup> Hill, G. R. , Jones, C. W. L. , Strategic Management – An Integrated Approach, Houghton Mifflin Company, Boston, 1989, page 264.

choose what price strategy which will ensure adequate admissibility enterprise in extreme environment and appropriate recognition of its parts due to the internal environment.

### Organizational control system

Unlike outside the organizational control system which is set off the units, by which it controls the success of the chosen strategy, organizational control system is located in the unit. It applies in all cases where there is no possibility to use outside organizational control, because objective standards cannot be placed, objective measurement and evaluation of performance control. Therefore, in all these cases it is difficult and expensive to develop, even when they do not have a sufficient budget to overhaul enterprise control of the enterprise goals, the manager must implement the organizational control.

There are two types of control -The first type of bureaucratic control and the second is the group control.

### Bureaucratic control

Bureaucratic control is based system on the general rules and procedures for guiding the behaviour of stock or divisions, functions and individuals. These are not just impersonal rules and procedures, but also the budget rules and procedures and standardization of shares.

It is worth mentioning that this control system requires the active involvement of management, which here has the role of the instrument controller. In certain cases it is necessary to constitute a special body to control. All this has significant impact on the costs of the system and organizational control.

**The rules of procedures** Accomplishment of the chosen strategy is precisely conditioned with the certain behaviour of participants. Therefore, from the manager is expected to specify in advance which behaviours should be present, and this can be achieved with the issuance of rules and procedurave.<sup>4</sup>

1. The mode of action of future shares with procedures is determined in details; these are chronological sequences of implementing shares. With such is best described how the implementation of specific work routines and repetitive and are built for the enterprise as a whole and about its organizational units. The procedures are the basis of every part of the organization, so their absence would open the way to anarchy and thus the destruction of the enterprise.
2. The rules are specific requirements that do not allow freedom decision-making, which means that they are of directive character. They vary from the procedures, but are in the process, there are procedures that deal by any rule, but these rules are self-applicable. Therefore, rules and procedures are taken in those cases when the business of the enterprise is not desirable that the employees, respectively, executives of such rules and procedures, shall use free decision- taking.
3. The power of rules and procedures is that they standardize the behaviour of the employees. If the employees respect the rules set forth, actions or decisions will be implemented in the same manner and at the same time, so the result will be the expectation and accuracy, which is the purpose of the control system.

The budget is usually defined as a numerical overview of the outcomes. This transcript can be in the form of value (cash) or in neutral form. In fact, it is a collection of rules for the allocation of the resources, primarily financial ones.

There are three types of budget of classification, but all can be summarized in<sup>5</sup>:

4. types of budget considering the budget period,
5. types of budget considering the inclusion of activity levels ,
- 6t. types budget regardless to its content,
7. types of budget considering the methodology of research of budget sizes.<sup>1</sup>

<sup>1</sup> Buble, M. , op. cit. faqe 214 – 215. For more deatails see: Buble, M. , op. cit. page 655 – 657.

8. The period related to the budget may be different, but it should be careful to enable more precise evaluations and with best opportunities for implementation of the chosen strategy. Relying on this aspect the annual budget and the capital budget usually changes.

a. The annual budget is the basic and the most important type of the budget, which as part of the strategic plan of the enterprise is transformed into an expression over a period of one year. Different from this, the capital budget includes pre-calculation of necessary capital investments for five to ten years.

9. Taking into account the activity of the enterprise the budget usually differs from its budget units.

a. The budget of the enterprise includes all activities of the enterprise as a whole and deals with long term or short term.

b. The parts of the enterprise covers only those parts of the budget of activity dealing with the relevant parts of the enterprise. The content of this budget depends on the type of organizational unit this budget deals with-whether it is strategic business unit, business unit, profit centre or just spending centre.

10. Taking into account the main budget usually is differs from particular special budgets that are directly or indirectly part of the main budget.

a. The main budget (Master Budget) usually consists of separate budgets connected between them, which in this total symbiosis represents the business activities of the future enterprise. Special budgets in this structure vary in content depending on the type and size of the company, however, including certain fixed contents.

b. In large enterprises, especially those multi-divisional, in addition to the main budget other budgets are constituted about each centre of responsibility. They are usually called responsibility budgets (Budget Responsibility).

11. Depending on the way they express the size, the budgets presented in the way of values and natural are usually the different.

a. The most common occurrence is the budget presented as a value, but any of the budgets of the budget follows the natural budget, it is the budget of working hours, budget machinery working hours, the budget of the quantity of products, etc.

b. Taking into account that the budget represents the state and the real state of certain sizes that have character of inputs or outputs, it enables dual control of the budget:

12. the budgetary control of the following activities,

13. budgetary control of performed activities.

14. Budgetary control of the following activities has a preventive control character, considering that it has to do with the ongoing activities. This means that it can be maintained within the framework of the planned activities. On the contrary it will signal the need for specific actions (corrective) which will provide a new alignment between separate budgets.

15. Budgetary control of the accomplished results is of correctional character, as presented after the activity is implemented-it means this control is the output control. It is implemented by comparing the planned sizes and the executed ones, how the management will be able to:

16. determine the causes of these avoidances,

17. foresee and take appropriate measures,

18. localize the responsibility of such avoidances,

19. assess the performance.

In case of avoidance (deviations) between the planned and the implemented sizes ones it is possible to use the static and dynamic sizes that are formed in budget planning. Until the static access takes to compare the sizes of the budget, despite the volume of accomplished production (or sales), dynamic approach to control firstly the size of planned results in the

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volume of accomplished production (or sales), and then compares with real sizes. According to the last method the real result of expenses is, which enables an adequate action to be taken.

For standardization it is possible to speak about the case when the content of the labour is specified or programmed. This means that in this direct way it affects the stand of the organization, with the aim of accomplishing the chosen strategy. It can be said that organizational control in the majority is based on standardization, since all the rules and procedures as well as budgets are based precisely on standardization. However, the rules are only a segment of standardization considering that it includes three aspects, as follows:

1. standardization of inputs,
2. standardization of throughputs,
3. standardization of outputs.

Standardization of inputs is a route how the organization can conduct human and material resources, even before engaging them in the process of work. Therefore, here we have to deal with so-called preliminary control (control Navigator motion control or retrospective), which is focused on the input of all resources in the enterprise. As for the human resources, this control is focused on recruiting and their selection and in accordance with the requirements of the work. In other words, in the process of human resource control will be accepted only those individuals whose performances are in line with the performance of the work.

In terms of material resources, this control is focused on the performance of materials such as quantity, quality, design, and trust, etc. Their behaviour in relation to the requirements of performance and on the basis of this decision-making whether, the inputs will be accepted or not accepted. In this way, the solvency of inputs is provided which is one of the assumptions that even further processes the processes in such inputs will be satisfactory.

Standardization of throughputs includes all activities pertaining to the transformation or conversion of inputs into outputs. Its task is to ensure that it takes place exactly as it is defined before

(solved in technological way or programmed) and activities to be developed in a manner and at the same time. Therefore, the desired goal of this standardization is predictable. Technological rules and procedures are key paths to achieve this standardization.

Control is selective (check yes/no and simultaneous control) and is focused on the process of transforming inputs into outputs.

Standardization of outputs has to do with what becomes specification of the characteristics of the performance of the product or final service (dimensions, tolerances etc.) in order to provide them the company applies the so-called after-action control, which is focused on the output or result of the enterprise, following the completion of the transformation process. For this purpose, the enterprise control systems use attributes such as QC, TQC and others.

### **Control of the group**

Different from bureaucratic control, control of the group is no formal arrangement and structured organic view of the behaviour of individuals and groups in the enterprise, and is a characteristic of the organizational structures of authorities. The behaviour is by group standards with culture of the corporate culture and self-control. The system of services is not individual performances but in groups.

Different from bureaucratic control which is a mechanism that is outside the group, the control group is the mechanism that formed by the group itself by setting an internal system of values and organizational standards. Its purpose is self-control, when the individual feels a responsibility to work at his/her best, both for its own interests, as well as the for the interests of the enterprise. Therefore, the control group of employees are not controlled by any violent external system, such as direct superiors or separate control group. In this case, they create themselves their own system of standards and values according to which they behave.

## Conclusions

Thus, with full responsibility we can say that values are relatively stable concepts, durable and fundamental in what they tend to achieve and strategies are specific types of operationalization. They constitute the basic framework for behaviour and leader. Important elements of successful enterprises are fundamental values such as quality, trust and service. The respect toward them in individual level presupposes the existence of the organization, reward, status, etc., but at the level of organization -successful implementation of the strategy.

Standards are concepts of desired behaviour forms, respectively standards for behaviour at work and the expected effects, by which the values are operational zed, respectively, the values are transformed into daily rules for the employees. It is believed that compliance of arranged standards is a condition for the existence and as well as the condition for profitability and success of the enterprise.

Values and standards are two important elements of organizational culture which is a part of each organization as a cause and consequence of the behaviour of individuals and groups in the organization. It is regarded as the most effective instrument of implementation of the strategy, therefore, without an adequate organizational culture, strategy simply cannot be implemented.

## LITERATURE

- [1] Buble, M., op. cit page 655 – 657.
- [2] Buble, M., op.cit. page 214 – 215.
- [3] Griffin, W.R., *Management*, 3rd Edition, Houghton Mifflin Company, Boston, 1990, page 606.
- [4] Hill, G.R., Jones, C.W.L., *Strategic Management – An Integrated Approach*, Houghton Mifflin Company, Boston, 1989, faqe 264.
- [5] Weihrich, Koontz,H. Op.cit. PAGE 581.

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## Perspectives of Prison Privatization as a Solution to the Prison System Crisis in Croatia

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### Abstract

This paper presents arguments supporting the statement that the Croatian prison system has been in a crisis for years and presents pros and cons of introducing prison privatization as a possible solution/remedy as observed by researchers, journalists, government officials and the prison staff and prisoners themselves in other countries that have previously introduced or still use private prisons as a way of dealing with excess number of prisoners, which, in vast majority of cases, was/is the primary, but not the only incentive for turning to the private sector for help. The initial section of the paper focuses on defining the terms „prison system crisis“ and „prison privatization“ and classifying the possible models of prison privatization based on available research papers and articles published from the late 1980s onward, after which an brief overview of the prison privatization process worldwide since the beginning of the modern prison privatization process is given. The central part of the paper gives: 1) an answer to whether prison privatization is even legally achievable in Croatia, and if not, what changes need to be done in that regard, and 2) an overview of the overall condition of the prison system in Croatia based on several parameters as they change through the years (2005-2014). Parameters presented, defined and analysed include, but not exclusively: available prisons and penitentiaries, prison capacity, prison population, prisoner flow, imprisonment rate, remand prison, misdemeanour prison, supletory prison, recidivism rate, parole, prison violence, suicide attempts, the use of force, staff-to-inmate ratio, staff turnover rates, etc. The final section of the paper is dedicated to presenting arguments for and against prison privatization. In the conclusion the author gives his insight on the current situation with the Croatian prison system and whether Croatia should experiment with prison privatization.

**Keywords:** prison system crisis, prison privatization, privatization models, pros and cons, parameters

### Introduction – Prison system Crisis

As any other part of the state government's public sector, prison system too is prone to crisis. And, just like with any other part of the public sector, the solution chosen to battle the crisis greatly depends on the existence of certain amount of political will to make (from a future political standpoint often risky) decisions, as well as financial constraints that a particular country's given budget presents.

Speaking of prison systems in this context is important because, judging from other countries' experiences, the debate about prison privatization does not arise until a prison system is no longer operating normally, and the question that then immediately arises is – what is prison system crisis and how do I recognize whether a particular prison system is in one?

And, indeed, it is not a question easily answered, but is, nevertheless, one that needs to be answered if one is to know whether something needs to be done and in which direction the changes should head, and, finally, if prison privatization is the way to go – which is the aim of this paper. Based on the literature researched for the purpose of this paper,<sup>1</sup> it would seem that certain guidelines exist that, if present and detected, would lead to the conclusion that the aforementioned question about the occurrence of prison system crisis should be answered affirmatively.

The parameters - as observed on the example of Croatia's prison system - are as follows (not necessarily in the given order):

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<sup>1</sup> Research materials included research papers, study reports, various official government and non-government association reports and releases, as well as a number of newspaper articles.

available penitentiaries and prisons – in particular, their size (capacity) and state,  
 prison occupancy rate – % of total available prison capacities filled,  
 prisoner flow – the amount of prisoners who pass through the prison system (measured on a yearly basis),  
 imprisonment rate – prisoners per 100,000 people/citizens (EU average is 80-90)  
 remand prison – prison in which a person is held prior to being sentenced,  
 misdemeanour prison – sentence served as a result of committing a minor offence or a misdemeanour; many countries are not familiar with this form of prison sentence,  
 supletory prison – prison sentence occurring after a fine for committing an offence has not been paid in a given period,  
 recidivism rate – the amount of repeat offenders - sentenced twice or more times to serve time in a prison,  
 parole – conditional release of prisoners prior to serving full length of their sentence,  
 probation – out-of-prison supervision period of a convicted person used in place of a prison sentence if the prisoner does not repeat the offence or commits a new one,<sup>1</sup> and  
 various prison discipline and order parameters - prison violence, suicide attempts, the use of force, staff-to-inmate ratio, staff turnover rates, etc.

It is important to note that, as far as research done for this paper goes, it was noticed that a larger number of the listed parameters were present in almost every country affected by prison system crisis, but not necessarily all the parameters, most likely because the severity of a single one can disrupt the normal flow of prison life so much that a prison system would indeed be in a crisis. This is especially the case with prison population, when the number of prisoners greatly exceeds prison capacities. Interestingly, it was also noticed that this parameter (overcrowding) has been a constant in all observed examples.

The eleven listed parameters are used to assess the state of eight key aspects of prison life which Logan<sup>2</sup> described in his work, and are widely accepted as such in the scientific community: security, safety, order, care, activities, justice, conditions, and management.

Considering the fact that there are so many parameters and aspects to have in mind, hardly anyone has tried to give a definition of prison system crisis, the exception being Cavadino and Dignan, who tried to define it by stating that it is a longer-lasting condition of the prison system in which the prisons are overcrowded, which negatively affects living conditions, hygiene, health care, treatment programmes, which then results in negativity between prisoners and the staff and leads to unrest, riot, crimes, escape and the decline of treatment programme success rate and involvement (if voluntary).<sup>3</sup>

As we can see, the given definition is basically a sum of all the aspects of prison life, and, because of that, not particularly useful, and it might be prudent not to get involved in trying to establish one too much. For this paper's reach, it is enough to understand of what elements the term is comprised.

<sup>1</sup> In some countries, the supervision activity conducted upon parole (or early release of prisoners) by parole officers is also called probation, which can often lead to confusion.

<sup>2</sup> Logan, C. H. (1992). Well Kept: Comparing Quality of Confinement in Private and Public Prisons. *The Journal of Criminal Law & Criminology*. Vol. 83, No. 3, pp. 577-613; The idea was later adopted, with minor modifications, by Perrone and Pratt, as well as Makarios and Maahs; cf. Perrone, D., Pratt, T. C. (2003). Comparing the quality of confinement and cost-effectiveness of public versus private prisons: What we know, why we do not know more, and where to go from here. *The Prison Journal*. Vol. 83, No. 3, pp. 301-322, Makarios, M. D., Maahs, J. (2012). Is Private Time Quality Time? A National Private-Public Comparison of Prison Quality. *The Prison Journal*. Vol. 92, No. 3, pp. 336-357

<sup>3</sup> Cavadino, M., Dignan, J. (2006). *Penal Systems – A Comparative Approach*. SAGE Publications. London, p. 43

When contemplating about prison system crisis, one must always keep in mind that different areas of public sector are very much influenced by one another, which is particularly important when reviewing the influence of budgetary cuts and changes made to the criminal justice system<sup>1</sup> as a whole on the prison system.

The following section of the paper will focus on defining the term *prison privatization* and classifying different models of prison privatization that have seen the light of day in practice.

### Prison Privatization, its Models and Aims

There is no single agreed-upon definition of the term *prison privatization* either, but in order to fully understand the rest of the paper and why it is even researched at all in this context, it is important to give an overview of what the term is used to describe and what models of privatization there are.

*Prison privatization* is a particular form of public-private partnership (or PPP) in which the state abandons a part of its prerogatives pertaining to building, maintaining and/or managing one or more prisons to a private sector investor: 1) in an attempt to save budgetary funds for other public sector areas and improve the conditions of existing prisons, or 2) in the situation where there is an immediate need of additional prison capacities.<sup>2</sup> The first situation may not necessarily be strictly in relation to prison system crisis, but often is.

Now, there is a very similar term that needs to be distinguished from prison privatization, and that is the term *prison industry*, which basically represents the involvement of the private sector in the productive aspect of prison life, and is today a standard in most countries' prisons, public or private. Therefore, public prisons with private sector involvement exclusively in production and distribution of prison products shall not be regarded as true private (or privatized) prisons.

Based on the given meaning of prison privatization and the possible degree of private sector involvement (excluding the above mentioned form of involvement), we can see that there are three basic models of prison privatization:

management model – private contractor takes over an already existing public sector prison and continues to manage it for the contracted period, ranging from several years all the way to several decades,

the so-called DCMF (*Design, Construct, Manage and Finance*) contract model – private investors agree to finance the construction of a new prison which is then under their management, for which they are paid a specified sum by the state on a regular (monthly, yearly) basis,<sup>3</sup>

and the semi-privatization model, also known as *outsourcing* – certain prison functions (such as medical care, prison maintenance or cooking) are performed by the private sector contractor.<sup>4</sup>

There are examples of prisons where a combination of two or all three of these models are used.

The discussion about the possibilities of prison privatization, as stated, usually doesn't start until the parameters show that the prison system is a long-lasting crisis, and that the prison conditions are steadily deteriorating. But even then, prison

<sup>1</sup> Changes in the legislature (e.g. in the Criminal Code, Prison Act) and the overall prison policy shifts (which usually precede changes in the legislature).

<sup>2</sup> Roth, L. (2004). *Privatisation of Prisons*. NSW parliamentary library research service, Background paper, No. 3. [Online] Available: <https://www.parliament.nsw.gov.au/researchpapers/Documents/privatisation-of-prisons/bg03-04.pdf>

(Apr 6, 2014), p. 2.; The proponents of prison privatization believe that private sector can manage prisons much more efficiently, and therefore appease both the contractors (the states) and the prisoners who are, in this context, the contract object (apart from prisons themselves), and will be further discussed in one of the following sections.

<sup>3</sup> Genders, E., Player, E. (2007). *The commercial context of criminal justice: prison privatisation and the perversion of purpose*. *Criminal Law Review*, p. 3

<sup>4</sup> Miller, D. W. (2010). *The Drain of Public Prison Systems and the Role of Privatization: An Analysis of State Correctional Systems*. ProQuest Discovery Guides. [Online] Available:

[http://www.antonioacasella.eu/nume/miller\\_2010.pdf](http://www.antonioacasella.eu/nume/miller_2010.pdf) (Apr 7, 2014), p. 3; For different classification example see e.g. Chang, T. F. H., Thompkins, D. E. (2002). *Corporations Go to Prisons: The Expansion of Corporate Power in the Correctional Industry*. *Labor Studies Journal*. Vol. 27, No. 1, pp. 45-69 or Cavadino, M., Dignan, J. (2006). *Penal Systems – A Comparative Approach*. SAGE Publications. London, pp. 304-324

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privatization does not always come up in debates, as there are many other ways (strategies) that, presumably, target specific flaws of the prison system, or try to alleviate the situation before the criminal procedure even reaches the imprisonment stage, such as:

decriminalization and depenalization,

additional restrictions to imprisonment in pre-conviction stages of the procedure,

abandoning or narrowing the usage of mandatory minimum prison sentences for certain offences, as well as the use of relatively short prison sentences,<sup>1</sup>

taking the current occupancy rates of prisons in consideration in the sentencing stage,

encouraging compassionate release of elderly and severely ill prisoners,

expanding the use of alternative sanctions (alternatives to prison sentence), an important part of which are the ones known as community sanctions.<sup>2</sup>

This paper will focus on the first two models of prison privatization for which it is characteristic that the amount paid to the private investor/contractor directly depends on the occupancy rate in prisons, increasing with higher occupancy rates of prisons.<sup>3</sup>

Prison privatization itself does not include any particular aim or goal. It is simply one of the means with which the government (more concretely, the Ministry of Justice, a part of which is the Bureau of Prisons, and it is a structure commonly found in most countries) is trying to accomplish one of the following:

reduce the costs of managing the prison system (by far the most important in practice),

improve the effects of rehabilitation of prisoners, and

improve order, safety and security in prisons.

The decision to turn to prison privatization as a solution to the prison system crisis is not something to be taken lightly, and therefore, it is very important to access arguments of both its proponents and critics, and then weigh the possible risks and benefits of prison privatization in relation to other possible methods of relieving the pressure within the prison system, of which primary source is the growing prison population.

But before those arguments are discussed in more detail, the following section will give an overview of the process of prison privatization in countries that are deemed as leading countries in the area, either by being among the first to attempt it, or by how many prisoners are held in private prisons (in absolute numbers or in percentages – some fit both criteria, e.g. United States).

## **A Comparative Overview of Prison Privatization in the World**

### The United States of America (USA)

Considering the long historic development of prison privatization,<sup>4</sup> it is only fitting that the overview starts from *The United States of America (USA)*, as USA are the cradle of prison privatization, both its historic form and the modern prison

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<sup>1</sup> It was recognized some time ago in many European countries that prison sentences up to one year can have more negative than positive effects on prisoners (for example, criminal infection). Therefore, they are slowly being abandoned and replaced by alternative sanctions.

<sup>2</sup> More on this topic in Atabay, T. (2013). Handbook on Strategies to reduce overcrowding in prisons. UNODC. [Online] Available: [https://www.unodc.org/documents/justice-and-prison-reform/Overcrowding\\_in\\_prisons\\_Ebook.pdf](https://www.unodc.org/documents/justice-and-prison-reform/Overcrowding_in_prisons_Ebook.pdf) (Jul 8, 2015), pp. 39-63, 174-180.

<sup>3</sup> This is considered to be an argument against prison privatization, and will also be further discussed as such in one of the following sections.

<sup>4</sup> The history of prison privatization is so extensive (e.g. convict lease system) that it deserves its own dedicated paper; see: Mason, C. (2013). International Growth Trends in Prison Privatisation. The Sentencing Project. Research and Advocacy for Reform. [Online] Available:

privatization wave, which occurred in the beginning of the 80s. The modern privatization process started out as semi-privatization (involving education, catering, cooking and building maintenance), and then expanded to full control of prisons, but progressing from juvenile detention facilities to adult prisons.

Prison privatization was viewed by many federal and state politicians as the right means to fight the ever-increasing prison population and overcrowding in prisons, which then led to worsening of prison conditions, as a result of which the courts started receiving more and more complaints from prisoners about inhumane conditions in which they were serving their prison sentences. Being respectful to the law, the courts started ruling in favour of prisoners and the states were faced with growing amounts of compensations and damages to pay, as well as with having to release prisoners which they did not deem fit to be released from prisons, simply because they could not meet the demands imposed upon them by court rulings. On top of all that, private lobbies sought to penetrate into more and more areas that were once considered inherent to and only performable by the state due to various constitutional legal and ethical constraints.<sup>1</sup>

As it so happens, those were also the first years after the start of a longer period of the so-called *harsh on crime* politics in the USA (which carried on in the UK as well), which started in the period of the conservative government of president Ronald Reagan, which meant that politicians would gain support by publicly blaming crime for literally everything bad that was, at the time, going on with the US economy (e.g. budgetary deficits). Legislation was passed to authorize the new penal policy. More notably, there were *three strikes and you're out* laws which imposed mandatory prison sentences for repeat offenders, and many drug offences started being punished by mandatory minimum sentences which started overcrowding prisons all over the USA very shortly.

Of course, we cannot disregard the fact that the USA have also traditionally been a country in which debates about freedoms in order to score political points have been particularly fierce (even nowadays, e.g. in regard to carrying firearms). It was believed that the private sector will manage prisons more effectively, and that, by using PPP as a means to build new prison capacities, the complex and lengthy public procedure could be somewhat shortened.

The process started slowly, but has since then exploded,<sup>2</sup> and there are currently over 130,000 prisoners serving their prison sentences in private prisons (federal and state prisons), which amounts to 8,4% of total prison population. If we only take federal prisoners into account, the percentage goes up to 19,1%.<sup>3</sup> As of 2014, out of a total of 50 states, 30 states have introduced some form of prison privatization, but percentages of prison populations vary greatly from state to state, ranging from 0,1% in Maryland to 43,6% in New Mexico.<sup>4</sup> The overall private prison population has been on a slow decrease the last few years (since 2012), but not yet enough to encourage the private prison project rejection hypothesis.

### The United Kingdom (UK)

Prison privatization in the United Kingdom lagged about 10 years compared to the USA, but the progression curve has since been quite similar, and the UK was still the first European country to experiment with modern prison privatization models. The then new conservative government of Margaret Thatcher tried to and succeeded in deregulating and transferring many public services to the private sector, as she believed it to be much more efficient.

<http://www.sentencingproject.org/wp-content/uploads/2015/12/International-Growth-Trends-in-Prison-Privatization.pdf> (Apr 6, 2014); Miller, D. W. (2010). *The Drain of Public Prison Systems and the Role of Privatization: An Analysis of State Correctional Systems*. ProQuest Discovery Guides. [Online] Available:

[http://www.antonioacasella.eu/nume/miller\\_2010.pdf](http://www.antonioacasella.eu/nume/miller_2010.pdf) (Apr 7, 2014); James, A., Bottomley, K., Liebling, A., Clare, E. (1997). *Privatizing prisons: Rhetoric and Reality*. SAGE Publications; Šeparović, Z. (2003). *Kazneno izvršno pravo i uvod u penologiju*. Pravni fakultet Zagreb, pp. 145-149; Cavadino, M., Dignan, J. (2006). *Penal Systems – A Comparative Approach*. SAGE Publications. London pp. 305-321

<sup>1</sup> See: Lippke, R. L. (1997). *Thinking About Private Prisons*. *Criminal Justice Ethics*, Vol. 16, No. 1, pp. 26-38; Dolovich, S. (2005). *State Punishment and Private Prisons*. *Duke Law Journal*. Vol. 55, No. 3, pp. 438-546;

<sup>2</sup> Particularly in the 90s, see James, A., Bottomley, K., Liebling, A., Clare, E. (1997). *Privatizing prisons: Rhetoric and Reality*. SAGE Publications, p. 8

<sup>3</sup> Carson, E. A. (2015). *Prisoners in 2014*. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics (pdf). [Online] Available: <http://www.bjs.gov/content/pub/pdf/p14.pdf> (Nov 11, 2015), p. 1

<sup>4</sup> Galik, L., Gilroy, L. (2015). *Annual Privatization Report 2015: Criminal Justice and Corrections*. Reason Foundation. [Online] Available: <http://reason.org/files/apr-2015-criminal-justice.pdf> (Nov 12, 2015), p. 4

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However, she too hesitated to experiment with privatization within the prison system, that is, until 1987, when, after a British delegation's visit to certain private prisons in the USA, the British Adam Smith Institute suggested prison privatization as a means to make budgetary cuts in the justice department.<sup>1</sup>

A year later, in 1988, the Parliamentary Committee recommended building new prisons through PPP, and as a result, the first private prison, HMP Wolds was open in 1992, during John Mayor's governing period.

It was the initial idea that the progress should be gradual and rational, but then in the same year several more new contracts were signed.

Despite what he claimed during the political campaign process, Tony Blair and his government continued down the same road.

The most used prison privatization model since the beginning of the process has been the DCMF model, although all three models were/are present.

As of 2014, there are 16 private prisons in the UK, of which 2 are in Scotland, which is often examined separately in regard to prison privatization, as it alone holds the highest private prisoner population rate in the whole world (20%).<sup>2</sup> The overall prison population rate of the UK is about 15%, which places it right behind Australia as the country with the 2nd highest private prisoner population rate in the world.

Some research<sup>3</sup> suggests that the contemporary British government's view on private prisons is mixed, as there are reports that suggest that the best private prisons operate better than the best public prisons, but also that the worst private prisons operate far worse than the worst public prisons. Also, there were several failures to comply with contractual obligations noted which then resulted in high fines for the private companies involved. Finally, it was noted that, upon examining daily prison routes, very few differences were found, which may lead to believe that prison privatization is not as effective as was presumed.

### Australia

Australia was often used as a release valve for convicts whose numbers started building up in the UK since the late 18th century, and considering the age we live in, that was plenty of time for stable privatization models to develop. And, indeed, it was the case, as Australia is, next to the USA and the UK, the country with the most developed prison privatization system in the world.

The modern prison privatization process started in the late 80s, a few years before it started in the UK. The first private prison opened was the Borallon Prison in the Queensland Territory under great influence from the United States, noticeable by the fact that the key managerial functions in the prison and the prisons opened afterwards were given to Americans.

As of 2014, five of total eight Australian Territories have privatized some of their prisons, which represented a total of 29,000 prisoners and a private prisoner population rate of 19%, which means that Australia is the country with the highest private prisoners population rate in the world.

### Developments in the Continental Europe, Asia and South America

Prison privatization was approached with extreme caution in the Continental Europe. Although all the countries initially expressed themselves negatively towards it, there has been some development in that area over the past two decades. One of those examples is France, where the hybrid semi-privatization model has been widely used. Similar processes have

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<sup>1</sup> Nossal, K. R., Wood, P. J. (2004). The Raggedness of Prison privatisation: Australia, Britain, Canada, New Zealand and the United States Compared. London University. [Online] Available: [http://www.antonioacasella.eu/nume/Nossal\\_2004.pdf](http://www.antonioacasella.eu/nume/Nossal_2004.pdf) (Apr 6, 2014), p. 9

<sup>2</sup> Vuletić, I. (2013). Prison privatisation as a solution for overcapacity of prisons in Croatia?. Zbornik z mednarodne vedecke konferencie Bratislavske pravnicke forum 2013, Bratislava, p. 1110

<sup>3</sup> Privatisation in Scotland (2006). A Briefing Paper of the Scottish Consortium on Crime and Criminal Justice. Glasgow. [Online] Available: <http://scccj.org.uk/documents/Prison%20Privatisation%20in%20Scotland.pdf> (Apr 6, 2014), p. 4

been noted in Belgium, the Netherlands and Germany.<sup>1</sup> There has also been speculation about possible prison privatization in Poland and Greece, but no projects have been put in motion as of yet. There are also countries who do not struggle with overcrowding and have started loaning prison capacities to other countries struggling with it through contracts, e.g. the Netherlands and Sweden.<sup>2</sup>

Apart from Japan, in which there are 4 private prisons (as of 2013), but only for first time offenders, other Asian countries have yet to experiment with prison privatization. There were some talks noted about Thailand and even China wanting to experiment, but as far as the author's information go, nothing concrete has been done yet.<sup>3</sup>

Unlike Asia, South America has seen a more rapid prison privatization development in the 21st century. The first country to privatize some of its prisons was Chile in 2003, joined by Brazil soon later. Recent data suggest that it is also being seriously considered in Peru and Mexico, as well as in the Carribran countries Jamaica and the Dominican Republic.<sup>4</sup>

The following section of the paper will focus on Croatia and will try to give an answer to whether its prison system is in a crisis and, if so, whether prison privatization could be one a valid solution.

### **Is Croatian Prison System Facing a Crisis?**

Reviewing the provisions of the Constitution and the Prison Act, one could not find anything that would directly oppose prison privatization. Namely, it has been the standing point of theory for some time that, in order to legally and formally prevent prison privatization, it is necessary to enact the prohibition, since the lack of provisions would pose too much of a grey area ("wigggle room"), because it is highly questionable whether prisoners in public and private prisons are being discriminated/treated differently in any way. In the USA, Illinois has done so specifically to prevent prison privatization.

Moreover, there is even a provision in Article 6. of the Prison Act which states that the Ministry can and does cooperate with other legal persons on improving the conditions in prisons, which, widely interpreted, could give way even for a process such as prison privatization.

To answer the question whether Croatia's prison system is in a crisis, it is important to get a grip on the current situation of the Croatian prison system in general.

For the purpose of this paper the data from 2014<sup>5</sup> and earlier years will be used only, as the 2015 Report has not yet been published or gone through the necessary parliamentary procedure due to the Parliament dissolving on July 15 this year.

According to the 2014 Report (p. 7) by the Bureau of Prisons of the Justice Ministry of Croatia, there are 12 prisons and 8 penitentiaries in use, most of which were built decades ago in the former Yugoslavian Republic, and were often used to deal with political opponents.

Since the prison system (both types included) became overcrowded in 2004 (maximum security capacities), we can say that the current condition has been ongoing for over a decade now,<sup>6</sup> with imprisonment rates constantly above EU average (more than 100 as of 2013). Overcrowding reached its peak in 2010 when the overall overcapacity was 54,13%. If we take a closer look at statistical data, we can notice that the overcapacity in maximum security prisons (which represent by far the greatest portion of total prison capacities) in the same year was 68%, and on top of all that, a great number of prisoners who should have been serving their sentences in maximum security conditions were forced to be moved to lower security

<sup>1</sup> See *Ibid.*; James, A., Bottomley, K., Liebling, A., Clare, E., *Privatizing prisons: Rhetoric and Reality*, SAGE Publications, 1997, p. 19

<sup>2</sup> See ICPS News Digest, 32nd Edition, March-April 2016, p. 13; ICPS News Digest, 18th Edition, November-December 2013, p. 3

<sup>3</sup> Mason, C. (2013). *International Growth Trends in Prison Privatisation*. The Sentencing Project. Research and Advocacy for Reform. [Online] Available:

<http://www.sentencingproject.org/wp-content/uploads/2015/12/International-Growth-Trends-in-Prison-Privatization.pdf> (Apr 6, 2014), p. 9

<sup>4</sup> *Ibid.*, p. 3

<sup>5</sup> Izvješće o stanju i radu kaznonica, zatvora i odgojnih zavoda za 2014. godinu, Vlada Republike Hrvatske

<sup>6</sup> The Constitutional Court of Croatia first warned about this problem in a 2008 decision (8 years ago), and continued warning in 2012 stating that, considering the current state of the prison system, overcrowding would not get resolved for several years to come (which proved to be on point, even though the last available report at the time was the 2012 Report).

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conditions. In addition, some prisons have very recently (2013) been reported to have had over 100% overcapacity, as was noted by the Constitutional Court in one of its reports.<sup>1</sup>

Mihoci also states that Croatia's additional problem is the lack of educated prison staff and prison guards, which affects safety and security in prisons.<sup>2</sup>

The number of ECHR proceedings against Croatia has also been on an increase over the past decade, which has greatly increased public expenditure on equitable relief payments, to which the Ministry was also warned by the Constitutional Court in several decisions and reports.<sup>3</sup> The Court also pointed out that the Croatian prison system was deemed inadequate by the CPT (Commission for the Prevention of Torture of the Council of Europe) during and after its several visits to Croatia.<sup>4</sup>

Several indicators of prison system crisis are still present in Croatia, even though a lot has been done in the past 2-3 years to relieve the pressure of the massive amount of prisoners on the whole system, which has seen the prison capacity occupancy rate finally drop beneath 100%<sup>5</sup> (at least overall) and those are:

the occupancy rate for maximum security prisons is still above 100%, even if only measured on December 31, which opens up opportunities for potential manipulations with numbers for statistical purposes,

the number of released prisoners has declined,

remand prisoners represent 21,57% of total prisoners at the end of the year, but overall the percentage is even higher and sitting at 29,35%, which means that more than every fourth prisoner is imprisoned prior to or without being convicted and sentenced to prison, which indicates a problem earlier in the criminal procedure, and even the possibility of misuse and overuse of an institute involving depraving people of their freedom,

recidivism rate is at a very high 36,7%, indicating that more than every 3rd prisoner is a repeat offender,<sup>6</sup>

supletory and misdemeanour prisons are on decline, but still represent almost 10% of total prisoners passing through the system as of 2014,

2013 and 2014 have shown a big decrease in the number of prisoners involved in educational programmes, as well as their involvement in other treatment programmes, which has decreased from 41,59% in 2010 to 25,1% in 2014,

conditional release numbers are also on decline in 2013 and 2014,

the amount of self-inflicted injuries has risen, but, more importantly, the percentage of the prisoners stating dissatisfaction with the result of the criminal procedure or their treatment in prisoners is again on the rise and almost back to the record level from 2009 (30%),

the number of visits has greatly declined in the past three years, which, coupled with the decrease of phone calls made and letters received, could indicate that prisoners are becoming more and more distant from the rest remainder of society, which may have a negative effect on rehabilitation as well as on post-release actions (which then affects recidivism rate),

the Ministry has stated the need for 4004 employees total in the prison system to cover every important aspect of prison life adequately; however, the gap between that provisional and the actual number of employees has seen nothing but increases over the last 10 years, as evidenced from 2005 through 2014 Reports, partly due to the lack of funds, but partly also due to the lack of applicants for job openings (e.g. prison medical staff) as well,<sup>7</sup>

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<sup>1</sup> Constitutional Court of the Republic of Croatia, U-X-5464/2012 (Jun 12, 2014), [Online] Available: <http://www.usud.hr/en/case-law>

<sup>2</sup> Mihoci, M. (2006) Sigurnost kaznionica i zatvora, Hrvatski ljetopis za kazneno pravo i praksu, No. 2, p. 904

<sup>3</sup> e.g. Constitutional Court of the Republic of Croatia, U-III-1437/2007 (Apr 23, 2008), Constitutional Court of the Republic of Croatia, U-X-5464/2012 (Jun 12, 2014).

<sup>4</sup> Visits were made in 1998, 2003, 2007 and 2012.; Reports are available at <http://cpt.coe.int/en/states/hrv.htm>

<sup>5</sup> As noted in the 2015 Report (p. 11).

<sup>6</sup> Reports prior to the 2012 Report did not keep track of this statistical category, but the last three available suggest no improvement in this area.

<sup>7</sup> The 2014 Report suggest that the prison system is operating on a 32,72% employee deficit.

over 60% of all employees (in an already underemployed prison system) pertains to security guards, and

expenditure has been exceeded income in the prison sector since 2005 all the way up to 2012, which caused the budgetary deficit carried on to 2013 to be as high as 56,4 million croatian kuna (over 10% of total prison system income for that year), and even though it was drastically decreased in 2014, it seems that we are still several years away from the prison system being able to reach financial balance; namely, out of total income of just over 534 million kuna in 2014, which was the first year to more noticeably decrease the deficit carried on to the next year, 493,7 million kuna was state financed through the state budget, and the total expenditure was 493,35 million kuna.

There are positive parameters, of course, but the amount and severity of some of the listed ones indicate that Croatia is indeed experiencing prison system crisis in several key aspects of prison life, particularly considering the fact that similar state has endured for over 10 years, and has withstood some drastic changes in the legislation, as well as the greatly increased use of probation since passing the Probation Act in 2012.<sup>1</sup>

### Arguments *For* and *Against* Prison Privatization

As was mentioned earlier in the paper, prison privatization debate has been a fierce one for almost 30 years, and it continues to have more and more educated people involved with their own opinions and analyses. Since there is a great number of papers trying to catalogue the for and against arguments, but even more papers who only represent one side of the story, this section will try to give an overview of all the main arguments from both proponents and critics of prison privatization.

*Proponents* of prison privatization mainly use the following arguments:

the private sector is more successful at management and innovation, so the privately managed prisons will be more cost-effective;<sup>2</sup> they support the argument by stating that: a) competition promotes ideas and pushes the boundaries of what can be accomplished with a set amount of resources, b) private prison administration is less burdened by bureaucratic procedures, c) private sector management has much more employment flexibility than the public sector prison administration,

since the private subject's profit will directly depend on how the prison operates, prison privatization will strengthen the responsibilities of prison administrators to ensure that prisoners get the necessary treatment and conditions, and that prisoners' rights are respected in every possible way, since the smoother the prison runs, the more profit the private sector subject will retain from the contract; prison privatization will also require of the government to find innovative, better ways to monitor how prisons operate, and it will be easier to perform the monitoring on private sector subjects than on itself,

in connection with the above presented argument, since private prisons will need to operate more efficiently, this will also set new standards for public prisons to follow, pulling the entire prison system forward and raise the standards bar higher.

Prison privatization *critics* usually present the following arguments:

the main argument of the critics is that the act of sentencing, as well as the execution stage of the criminal procedure is an inherent prerogative of the state as part of the social contract between the People who agreed to delegate the authority exclusively to the State; prison policy is an integral part of a wider, criminal policy, which cannot be delegated by the State to any third party, a legal construct different than the State itself, because imprisonment in itself contains limitations to person's fundamental rights and freedoms; simply put - when a person breaks the law, he/she expects to be sanctioned by the State, and his/her mindset is shaped in a way to be prepared to accept the consequences; therefore, the State will, by delegating imprisonment to private sector subjects, deal damage to its authority,<sup>3</sup>

<sup>1</sup> <http://dalje.com/en-croatia/probation-helps-reduce-the-number-of-prisoners-says-minister/499558>

<sup>2</sup> Critics warn that this is not the case and quote studies conducted by researchers which suggest the cost reduction to be minimum at best, and not worth the risks of privatization, especially on the safety, security and order aspects of prison life. Most important studies will be discussed in the following section.

<sup>3</sup> Proponents claim that, since the authority to imprison did not originate within the State, but was given to the State by the People (is derivative), as long as there is no objection from the People, the State can further delegate this authority to other subjects, as long as it keeps supervisory powers over private subject's activities

the motive for profit has never been, and should never be the goal of imprisonment, which, they claim, it clearly is for participating private sector subjects; the goals of punishment<sup>1</sup> and imprisonment are both well established in legal theory, as well as formalized in fundamental criminal law acts, such as the Criminal Code and the Prison Act (which is the case in Croatia);<sup>2</sup> critics express concerns that this could mean: a) lowering standards to decrease expenditure, b) hiring less experienced personnel and paying them less, as well as providing them with less job security, which could have a demotivating effect, c) if private sector subjects know they will boost their profit by having more prisoners, i.e. being as close to full capacity as possible, while not exceeding it, it will suit them to keep their prisons filled by promoting lobbying for stricter laws, harsher sentencing practices and deliberately provoking prisoners in order to extend their prison stay by their actions, d) hiding problems within prisons from publicly available records to avoid financial repercussions,<sup>3</sup> and e) accepting only prisoners who require less care and less security, as they less costly to keep imprisoned,

making profit from imprisonment is unethical,<sup>4</sup> and even though there are private subjects in other branches of the public sector (e.g. private medical practice), they are aimed at relieving pain, not inflicting it, of which, though mostly not physically, imprisonment is a type.<sup>5</sup>

### Is Prison Privatization Worth the Possible Risks?

To answer this question, it is necessary to point out the possible risks of prison privatization.

Simply put, almost everything that the critics of prison privatization point out as arguments against prison privatization are possible risks associated with it, although there are certain arguments that critics tend to attribute particular characteristics specifically to private prisons, but are, in reality, present in both private and public prisons, albeit for different reasons.

A good example of such a characteristic would be the lack of personnel motivation for prisoner's treatment and overall rehabilitation in prison. On one hand, in private prisons, it would stem from the fact that their employee's jobs are less paid, more insecure, the personnel is often forced to work extra hours, they are often unprepared for the challenges of managing particular aspects of prison life on a day-to-day basis. On the other hand, in public prisons the personnel is less motivated because they do not feel the consequences of the failed treatment and resocialization on their skin since their jobs are usually well-protected, regularly and better paid (in comparison with private prison employees), and their jobs are often much more secure, whether the prison is operating at 50% capacity or 150% capacity. It is unrealistic to expect of them to go as far as to think about that the better the treatments work, the less prisoners will return to prison, and will result in reduced work load for the same "prize."

Hidden in this section's title is another question - are private prisons more cost-effective than public prisons? This is, in vast majority of cases, as stated earlier, the primary reason to privatise prisons. The remaining cases are usually situations in which an urgent expansion of prison capacities is necessary, and the private sector subjects will only invest and contract if they also take over prison administration for a minimum period of time.

<sup>1</sup> The aims are: retribution, deterrence, incapacitation and rehabilitation/reintegration, See van Zyl Smit, D., Snacken, S. (2009). *Principles of European Prison Law and Policy*. Oxford University Press, pp. 81-83

<sup>2</sup> Art. 2 of the Prison Act states that the primary purpose of imprisonment is resocialize an individual and prepare one for life according to legal rules and social/ethical principles through humane treatment and respecting one's dignity.

<sup>3</sup> Lundahl et al. (2009). *Prison Privatization: A Meta-Analysis of Cost-Effectiveness and Quality of Confinement Indicators*. *Research of Social Work Practice*. Vol. 19, No. 4, pp. 383-394, cf. Headley, A., Garcia-Zamor, J. C. (2014). *The Privatization of Prisons and its Impact on Transparency and Accountability in Relation to Maladministration*. *International Journal of Humanities, Social Sciences and Education*, Vol. 1, No. 8, pp. 23-34

<sup>4</sup> More on the ethical dilemma of prison privatization in Reisig, M. D., Pratt, T. C. (2000). *The Ethics of Correctional Privatization: Examination of the Delegation of Coercive Authority*. *The Prison Journal*. Vol. 80, No. 2, pp. 210-222, Lippke, R. L. (1997). *Thinking About Private Prisons*. *Criminal Justice Ethics*, Vol. 16, No. 1, pp. 26-38, Barak-Erez, D. (2011). *The Private Prison Controversy and the Privatization Continuum*. *Law & Ethics of Human Rights*, Vol. 5, No. 1, pp. 138-157

<sup>5</sup> Roth, L. (2004). *Privatisation of Prisons*. NSW parliamentary library research service, Background paper, No. 3. [Online] Available: <https://www.parliament.nsw.gov.au/researchpapers/Documents/privatisation-of-prisons/bg03-04.pdf> (Apr 6, 2014), pp. 36-60, cf. Gottfredson, S. D., McConville, S. (1987). *America's Correctional Crisis: Prison Populations and Public Policy*. Greenwood Press. Westport, Connecticut, pp. 230-232, Dimovski, D. (2014). *Privatni zatvori*. *Zbornik radova Pravnog fakulteta u Nišu*, Vol. 53, No. 68, pp. 551-557

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Since the early 90s, several authors have published reports on studies they conducted in their countries trying to, on a case-to-case and more generally, compare several representative examples from both private and public prison sides, with the methodology advancing with nearly every comparison attempt. Some studies have approached the matter strictly from a financial perspective, while others have studied both financial benefits and the prison life quality impact. There have also been authors who studied only the qualitative aspects of private prisons.

When it comes to the quality of prison services, it is the opinion of the majority of researchers that the services provided are roughly of the same quality, and will, for that reason, not be discussed further in this paper.

The attention here will, therefore, focus on answering, perhaps (opinions may differ here), the more important question - are private prisons more cost-effective? – even though, as it turns out, the comparisons yielded about the same results as the qualitative studies.

It is interesting to note that, as the studies progressed with time, it seems that it became more and more obvious that the differences in cost-effectiveness between private prisons and public prisons may not be as significant as was once believed to be the case. In fact, the only meta-analysis, which aimed to detect if there are differences in cost-effectiveness between private prisons and public prisons, conducted by Praat and Maahs in 1999, suggested that the ownership factor played an insignificant role in determining how well a particular prison would fare in the cost-effectiveness scheme. The determining factors proved to be:

economy of scale - the closer the prison population is to the maximum prison capacity, the lower the costs will be, and vice versa,

the state of prison infrastructure - the newer the prison, the lower the costs were, due to newer technologies used, requiring less maintenance and manpower, and relying more on electronic surveillance, and

security level of the prison - the higher the security level, the higher the costs were of running the prison.<sup>1</sup>

The reason why meta-analysis is believed to be the most reliable method for this kind of analysis is the very nature of meta-analysis, which is basically applying statistical methods to already existing research papers selected by criteria that meet certain requirements set in advance, to avoid partiality while reviewing the findings of each paper included individually to reach a general conclusion.<sup>2</sup>

### **Should Croatia Turn to Prison Privatization as a Possible Solution to its Prison Crisis?**

The purpose of this paper was to signify the prison system crisis Croatia has been dealing with for over 10 years, to try to at least crack the complexity of the term, to explain what prison privatization is and what its place is in resolving a prison system crisis.

While there is a fair amount of evidence to suggest that prison privatization does not nearly meet the cost-effectiveness expectations as we were initially led to believe by certain politicians and early authors, there is still some validity in approving the prison privatization undertaking in situations which involve sudden and sharp increases in prison population. In those types of situations, resorting to the private sector for assistance might sometimes be the only way to relieve the strain on the prison system as a whole, but it is definitely not a permanent solution, as the real reasons for the existence of the need to privatize often lie in earlier stages within the criminal justice system (often it is the legislation or practice that requires adjustments). When the source of the prison crisis is within the prison system itself (reasons other than strict laws and harsh sentencing), e.g. better education of prison staff, investments in improving the monitoring system, delegating the monitoring activity to non-governmental institutions, etc., there are many safer ways to ensure improved prison conditions in public prisons.

Since Croatia traditionally belongs to the group of countries following the trends in Germany when it comes to criminal law, and the only present prison privatization model there is the one that isn't really prison privatization in the full sense of the term, and adding the facts that none of the surrounding countries have experimented with prison privatization yet, the fact

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<sup>1</sup> Pratt, T. C., Maahs, J. (1999). Are Private Prisons More Cost-Effective Than Public Prisons? A Meta-Analysis of Evaluation Research Studies. *Crime & Delinquency*, Vol. 45, No. 3, pp. 358-371

<sup>2</sup> More on the criteria used in *Ibid.*, pp. 363-368.

that the prison population in Croatia has grown a lot, but steadily, and the fact that things have shown signs of improvement on their own in 2013 and 2014 in the mix, the only possible conclusion at this point can be that prison privatization is not something that would be recommended for Croatia at this time, but should be considered in future calculations when thinking about building new prison capacities, which are already necessary (since the prison infrastructure is mostly old and badly maintained), but will in near future become absolutely mandatory, if we are not to be constantly condemned and fined by the courts, both domestic and supranational (such as the European Court of Human Rights), and other institutions (e.g. CPT), because it does not seem Croatia, nor almost any other country for that matter, will ever have "spare" funds to finance the construction of new prison capacities. Private sector subjects could present a sort of an opportunity to pay the sum we would have to assign anyway over yearly installments with small interests.

## References

- [1] Atabay, T. (2013). Handbook on Strategies to reduce overcrowding in prisons. UNODC. [Online] Available: [https://www.unodc.org/documents/justice-and-prison-reform/Overcrowding\\_in\\_prisons\\_Ebook.pdf](https://www.unodc.org/documents/justice-and-prison-reform/Overcrowding_in_prisons_Ebook.pdf) (Jul 8, 2015).
- [2] Barak-Erez, D. (2011). The Private Prison Controversy and the Privatization Continuum. *Law & Ethics of Human Rights*, Vol. 5, No. 1, pp. 138-157.
- [3] Carson, E. A. (2015). Prisoners in 2014. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics (pdf).
- [4] [Online] Available: <http://www.bjs.gov/content/pub/pdf/p14.pdf> (Nov 11, 2015).
- [5] Cavadino, M., Dignan, J. (2006). *Penal Systems – A Comparative Approach*. SAGE Publications. London.
- [6] Chang, T. F. H., Thompkins, D. E. (2002). Corporations Go to Prisons: The Expansion of Corporate Power in the Correctional Industry. *Labor Studies Journal*. Vol. 27, No. 1, pp. 45-69.
- [7] Constitutional Court of the Republic of Croatia, U-III-1437/2007 (Apr 23, 2008).
- [8] Constitutional Court of the Republic of Croatia, U-X-5464/2012 (Jun 12, 2014).
- [9] Dimovski, D. (2014). Privatni zatvori. *Zbornik radova Pravnog fakulteta u Nišu*, Vol. 53, No. 68, pp. 547-566.
- [10] Dolovich, S. (2005). State Punishment and Private Prisons. *Duke Law Journal*. Vol. 55, No. 3, pp. 438-546.
- [11] Galik, L., Gilroy, L. (2015). Annual Privatization Report 2015: Criminal Justice and Corrections. Reason Foundation. [Online] Available: <http://reason.org/files/apr-2015-criminal-justice.pdf> (Nov 12, 2015).
- [12] Genders, E., Player, E. (2007). The commercial context of criminal justice: prison privatisation and the perversion of purpose. *Criminal Law Review*. pp. 513-529.
- [13] Gottfredson, S. D., McConville, S. (1987). *America's Correctional Crisis: Prison Populations and Public Policy*. Greenwood Press. Westport, Connecticut.
- [14] Headley, A., Garcia-Zamor, J. C. (2014). The Privatization of Prisons and its Impact on Transparency and Accountability in Relation to Maladministration. *International Journal of Humanities, Social Sciences and Education*, Vol. 1, No. 8, pp. 23-34.
- [15] ICPS News Digest, 18th Edition, November-December 2013.
- [16] ICPS News Digest, 32nd Edition, March-April 2016.
- [17] Izvješće o stanju i radu kaznionica, zatvora i odgojnih zavoda (2014). Vlada Republike Hrvatske.
- [18] James, A., Bottomley, K., Liebling, A., Clare, E. (1997). *Privatizing prisons: Rhetoric and Reality*. SAGE Publications.
- [19] Lippke, R. L. (1997). Thinking About Private Prisons. *Criminal Justice Ethics*, Vol. 16, No. 1, pp. 26-38.
- [20] Logan, C. H. (1992). Well Kept: Comparing Quality of Confinement in Private and Public Prisons. *The Journal of Criminal Law & Criminology*. Vol. 83, No. 3, pp. 577-613.
- [21] Lundahl *et al.* (2009). Prison Privatization: A Meta-Analysis of Cost-Effectiveness and Quality of Confinement Indicators. *Research of Social Work Practice*. Vol. 19, No. 4, pp. 383-394.

- [22] Makarios, M. D., Maahs, J. (2012). Is Private Time Quality Time? A National Private-Public Comparison of Prison Quality. *The Prison Journal*. Vol. 92, No. 3, pp. 336-357.
- [23] Mason, C. (2013). International Growth Trends in Prison Privatisation. *The Sentencing Project. Research and Advocacy for Reform*. [Online] Available:
- [24] <http://www.sentencingproject.org/wp-content/uploads/2015/12/International-Growth-Trends-in-Prison-Privatization.pdf> (Apr 6, 2014).
- [25] Mihoci, M. (2006) Sigurnost kaznionica i zatvora, *Hrvatski ljetopis za kazneno pravo i praksu*, No. 2, pp. 879-905.
- [26] Miller, D. W. (2010). The Drain of Public Prison Systems and the Role of Privatization: An Analysis of State Correctional Systems. *ProQuest Discovery Guides*. [Online] Available:
- [27] [http://www.antoniocasella.eu/nume/miller\\_2010.pdf](http://www.antoniocasella.eu/nume/miller_2010.pdf) (Apr 7, 2014).
- [28] Nossal, K. R., Wood, P. J. (2004). The Raggedness of Prison privatisation: Australia, Britain, Canada, New Zealand and the United States Compared. *London University*. [Online] Available: [http://www.antoniocasella.eu/nume/Nossal\\_2004.pdf](http://www.antoniocasella.eu/nume/Nossal_2004.pdf) (Apr 6, 2014).
- [29] Perrone, D., Pratt, T. C. (2003). Comparing the quality of confinement and cost-effectiveness of public versus private prisons: What we know, why we do not know more, and where to go from here. *The Prison Journal*. Vol. 83, No. 3, pp. 301-322.
- [30] Pratt, T. C., Maahs, J. (1999). Are Private Prisons More Cost-Effective Than Public Prisons? A Meta-Analysis of Evaluation Research Studies. *Crime & Delinquency*, Vol. 45, No. 3, pp. 358-371.
- [31] Privatisation in Scotland (2006). A Briefing Paper of the Scottish Consortium on Crime and Criminal Justice. Glasgow. [Online] Available:
- [32] <http://scccj.org.uk/documents/Prison%20Privatisation%20in%20Scotland.pdf>
- [33] (Apr 6, 2014).
- [34] Reisig, M. D., Pratt, T. C. (2000). The Ethics of Correctional Privatization: Examination of the Delegation of Coercive Authority. *The Prison Journal*. Vol. 80, No. 2, pp. 210-222
- [35] Roth, L. (2004). Privatisation of Prisons. NSW parliamentary library research service, Background paper, No. 3. [Online] Available:
- [36] <https://www.parliament.nsw.gov.au/researchpapers/Documents/privatisation-of-prisons/bg03-04.pdf> (Apr 6, 2014)
- [37] Šeparović, Z. (2003). Kazneno izvršno pravo i uvod u penologiju. Pravni fakultet Zagreb.
- [38] van Zyl Smit, D., Snacken, S. (2009). *Principles of European Prison Law and Policy*. Oxford University Press.
- [39] Vuletić, I. (2013). Prison privatisation as a solution for overcapacity of prisons in Croatia?. *Zbornik z mednarodnej vedeckej konferencie Bratislavske pravnicke forum 2013, Bratislava*.

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## Employees' Motivation and Management of Human Resources in Public Enterprises in Dukagjin's Plain

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### Abstract

This research is realized in city of Peja, in which included 30 employees of public enterprises that operate in this city. Participants were aged between 25-48; they were 8 females and 22 males. For the data collection is used an applied questionnaire with 12 questions. The first hypothesis of this research: "Motivation at work has a positive relation with the management of human resources" is made correlative analysis and we have this statistical production [ $r = .430^*$ ,  $p < .018$ ], a result that supports the hypothesis of this research.

**Keywords:** Motivation, management, human resources

### Introduction

The purpose of this research has been to see if motivation has a positive relation with management of human resources. In analyzed part of the literature is cited motivation, motivation at work and the management of human resources. After rising of the hypothesis and research realization is concluded that motivation of employees at work has a positive relation with the management of human resources.

### Literature Reviews

Motivation is a specific need or desire that presses the organism and directs its behavior toward to a goal. All motives are put in motion by some kind of incentives: Body condition, low level of sugar in blood or dehydration or a feeling as loneliness, guilty or anger. When something causes a directed behavior toward to a goal, we say that it has motivated the individual (Morris & Maisto, 2008).

Motivation usually is defined as something that directs the behavior? What is included here? Psychologists who study the motivation are concentrated in three main issues. First one, what is it that causes a person to make an act? Second, what leads a person to a certain goal? And third, what makes a person to be reluctant in his attempts to achieve that goal (Musaj, 1999).

People are motivated to seek for social equality in the rewards they take for the high performances. According to him the result from job includes: payment, recognition, promotion, social relationships, internal reward, rewards of different inputs like time, experience, attempts, education and loyalty. It suggests that people have tendencies to see the results and their contribution as a report and then they compare these reports with the others and to turn back to motivation if this report is high (Adams, 1965).

There are three main categories of motives: biological motives, stimulant motives and learned motives in society. Biological motives as hunger, thirst, temperature regulation and sex have a determined physiological base. Stimulant motives as sensory stimulation, quest, curiosity, pleasure and relationships with the others, and competence etc make the individual to seek sensory stimulation through interaction with environment. Learned motives in society as success, power and attachment are mainly determined from learning and have a base in social experiences (Pettijohn, 1997).

Which are needs and expectations of citizens and how can they affect in the behavior and their performance at work. Motivation is a complex topic, this something very personal and is affected from many variables (Farren, 2000), reminds

us twelve human needs that have been around from beginning of written history: family, health, prosperity, work, career, economy, learning, shelter, social and spiritual interactions, community, free time, mobility and environment and safety. Work and private life in the new millennium will continue to revolve around twelve human needs (Farren, 2000).

Motivation at the work place plays a central role in the field of management practically and theoretically. Managers see motivation as an integral part of equation of the performance in all levels, whereas organizational researchers see it as a basic building block in the development of the useful theories and practices of the effective management. In fact topic of motivation describes many subfields that constitute: study of management, leadership, including in teams, performance of management, managerial ethics, decision and organizational changes. Many business managers today aren't aware for the effects that motivation can have (has) in their business and for this reason is important for them to learn and understand factors that determine the positive motivation in the work place (Atkinson, 1964).

Managers should understand what motivates the employees within the context of the roles they perform. From the all functions that a manager performs, employees' motivation is probably the most complicated one. This is because that which motivates employees changes continually (Bowen & Radhakrishna, 1991). Many years ago, theoreticians have tried to reveal what motivates people. The most distinguished are: Taylor (1856-1917), Mayo (1880-1949), Maslow (1908- 1970), McGregor (1906-1964) dhe Herzberg (1923-2000). By all means the motivation is so important that the theoreticians still continue to develop their theories for motivation. This entire are build on the basis of the old theories .Theory is based in five requirements or needs.

1. **Survival:** Initially people should fulfill survival necessities or to win enough money to buy food and clothes.
2. **Safety:** When are fulfilled these needs, people will be safe. At work this means to have a safe work place and continues incomes.
3. **Society:** when people feel safe and ask for friends and social activities
4. **Status:** Highest orders should be fulfilled. First is the status-people should feel respected for that who they are.
5. **Self-fulfillment:** Finally, this is what Maslow called self-requirement in order to achieve the goal

Management in general meaning of the word has these synonyms: placement, regulation, planning, inspection, organization, direction, goal achievements, realization and also domination, manipulation, incurrence and fraud etc. If we analyze all these synonyms we can conclude that these include: regulation, planning, organization, direction or realization. All these have the meaning of a one way process, the manager says to his "inferior" employees what they should work. Manager decides what to work, whereas those "under" (inferiors) are equipments to achieve a certain goal. They often call the manager "boss" whereas his assistant "the right hand", because the right hand does exactly what the head says. Managers are called supervisors, because is presupposed that supervisors have excellent views in certain situations (Ramosaj, 2007). Human resources are people (including their knowledge, abilities and skills), who perform concrete duties within the enterprise. Resources present mean through which enterprises, during the fulfillment of their mission, they transform these resources into new values to use them according to the needs and requirements of the market. People that deal with the changing of the organizational structure and the leadership of the enterprises are called managers. Meanwhile, the function of planning, human resources, leadership and the inspection of works in the enterprise present the management. Management of the human resources is a scientific discipline which for subject has the human, his duties, education, motivation, reward etc. Management realizes his intentions as a function using necessary human and physical resources. Management of human resources is a systematic work of a strategic character which in the process of management has to do with the relations between the enterprise and the employees with the processes: employment, integration and education of the employees .Management of human resources is considered as an asset with critical importance through which the managers achieve their objectives, secure the stability of the enterprise and its competitive abilities (Havolli, 2009).

The nature of human beings is pretty complex with a entirety of needs, desires and aspirations, which are carried in their work place, determine and explain motives ,behavior and attitude that they adapt during the realization of the their concrete duties within the frame of business organizations. The interest of the scientists and managers to study this wide diapason of factors has been increasing and their importance is considered indisputable for three main reasons: a) For the versatile

recognition of human nature and that is one of the main aspects that determine the organizational way of work, of its projection, leadership style that must be followed, forms of rewards that should be applied, forms and methods of inspection, the scale of centralizing authority and the way to solve conflicts etc. b) For human resources that play a determinant role in the general performance frame of organization. c) For the today's environment in which operate business organizations, where social elements take increasingly paramount importance, where the managers have understood that people's professional education of motivated people in the most appropriate way is a crucial condition on further using and development of modern technology and also to keep the long-term competitive position (Llaci,2008).

Hypothesis *"Motivation at work has a positive relation with the management of human resource"*

## Methodology

### Participants

In this research have participated 30 participants who are employees in different public enterprises in commune of Peja. Their age was 25-48 whereas according to the gender distribution there were 8 females and 22 males. Participation of the respondents has been voluntary with a casual meeting with them in city of Peja.

### Instrument

For the collection of the data are used a questionnaire for motivation at work which has 12 questions which were divided: 1=strongly I don't agree, 2=I don't agree, 3=neutral, 4=I agree, 5=I strongly agree. First six questions were about internal motivation at work and the last six for external motivation at work.

### Procedure

To realize this research we firstly had a random meeting with some citizens who declared that are employed in certain public enterprises. They declared if they want to participate voluntarily to fill in the questionnaire. During the realization of the questionnaire there wasn't any uncertainty about the questions and for about five minutes they filled in the questionnaire. Whereas for the data elaboration was used statistical program SPSS.

## Results

Table 1: Correlation between motivation at work and management of human resources

Correlations		Motivation at work	Management of human resources
Motivation at work	Pearson Correlation	1	.430*
	Sig. (2-tailed)		.018
	N	30	30
Management of human resources	Pearson Correlation	.430*	1
	Sig. (2-tailed)	.018	
	N	30	30

\*. Correlation is significant at the 0.05 level (2-tailed).

To testify the first hypothesis of this research: "Motivation at work has a positive relation with the management of human resources" is made correlative analysis and we have this statistical production [ $r = .430^*$ ,  $p < .018$ ].

## Conclusions

In this study primarily is analyzed relevant literature for motivation and is concluded that it is the internal force or energy of a human that directs his behavior towards an activity or a certain purpose. Whereas motivation at work is concluded that is a complex process and very important one which plays a dominating role in the performance of employees in the frame of their activity in the enterprise. Therefore managers must be very careful and conscious for the way and strategy they use to manage their employees. Importance of motivation at work is best illustrated by Maslow theory featured to the analyzed part of literature. Whereas regarding to the management of human resources is understood that is presents and important

component put within the enterprises that means leadership or direction, preparation and functioning with human resources. In the other hand motivation at work without any doubt is interrelated with the management of the human resources, so this research is led by such hypothesis. To testify the first hypothesis of this research: "Motivation at work has a positive relation with the management of human resources "is made correlative analysis and we have this statistical production [ $r= .430^*$ ,  $p< .018$ ]. This result is important and it supports in principle the first hypothesis of this research. Although many times can be perceived that commitment and activity of the managers is low in comparison with human resources in public enterprises and from this results that they are very active in the commitment of the human resources and in general the employees motivation at work .

## References

- [1] Adams, J. S. (1965). *Inequity in social exchange*. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2) (pp. 267-299). New York: Academic Press.
- [2] Havolli, Y. (2009). Menaxhimi i burimeve njerëzore. faqe 10
- [3] Llaci, Sh. (2009). Menaxhimi", Tiranë, f. 286.
- [4] Maisto, A.A., & Morris, G. C. (2008). *Understanding Psychology*. Pearson Education
- [5] Musai, B. (1999). *Psikologji edukimi*. Toena. Tiranë
- [6] Pettijon, T. (1997). *Psikologjia një hyrje koncize*. Dukagjini. Pejë
- [7] Ramosaj B. (2007).. *MANAGEMENT, Bazat e menaxhimit*. Prishtinë.
- [8] Teoria e Maslow(1908-1970)

## Questionnaire

Circle "1--" If you strongly disagree

Circle "2"-- If you don't agree

Circle "3" --If you are neutral

Circle "4"--- If you agree

Circle "5" --If you strongly agree

Nr.	Declarations	1	2	3	4	5
1.	I am here to do this job to and to achieve an goal.	1	2	3	4	5
2.	I go to work voluntarily.	1	2	3	4	5
3.	I am very pleased when I work	1	2	3	4	5
4.	I try to do my best.	1	2	3	4	5
5.	I love my job because from the incomes I take I hold my family.	1	2	3	4	5
6.	I work only to provide money and welfare.	1	2	3	4	5
7.	I am ready to do extra work if my manager asks me to do that.	1	2	3	4	5
8.	I resist the pressure of the management because I want to keep my job.	1	2	3	4	5
9.	From me it is required to perform quickly	1	2	3	4	5
10.	The manager continually requires from us to work and usually under pressure.	1	2	3	4	5
11.	Sometimes the break time partially we have to use at work.	1	2	3	4	5
12.	From our work the organization where we work achieves positive results.	1	2	3	4	5

## Tables

1. I am here to do this job to and to achieve a goal.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	You disagree	5	16.7	16.7
	You are neutral	8	26.7	43.3
	You agree	10	33.3	76.7
	You strongly agree	7	23.3	100.0

Total	30	100.0	100.0	
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## 2. I go to work voluntarily.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You disagree	8	26.7	26.7	26.7
You are neutral	14	46.7	46.7	73.3
You agree	7	23.3	23.3	96.7
You strongly agree	1	3.3	3.3	100.0
Total	30	100.0	100.0	

## 3. I am very pleased when I work.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You strongly disagree	3	10.0	10.0	10.0
You disagree	4	13.3	13.3	23.3
You are neutral	14	46.7	46.7	70.0
You agree	7	23.3	23.3	93.3
You strongly agree	2	6.7	6.7	100.0
Total	30	100.0	100.0	

## 4. I try to do my best

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You strongly disagree	1	3.3	3.3	3.3
You disagree	2	6.7	6.7	10.0
You are neutral	8	26.7	26.7	36.7
You agree	12	40.0	40.0	76.7
You strongly agree	7	23.3	23.3	100.0
Total	30	100.0	100.0	

## 5. I love my job because from the incomes I take I hold my family

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You strongly disagree	1	3.3	3.3	3.3
You disagree	3	10.0	10.0	13.3
You are neutral	13	43.3	43.3	56.7
You agree	5	16.7	16.7	73.3
You strongly agree	8	26.7	26.7	100.0
Total	30	100.0	100.0	

## 6. I work only to provide money and welfare.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You strongly disagree	1	3.3	3.3	3.3
You disagree	4	13.3	13.3	16.7
You are neutral	11	36.7	36.7	53.3
You agree	11	36.7	36.7	90.0
You strongly agree	3	10.0	10.0	100.0
Total	30	100.0	100.0	

## 7. I am ready to do extra work if my manager asks me to do that.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid You disagree	6	20.0	20.0	20.0

	You are neutral	7	23.3	23.3	43.3
	You agree	13	43.3	43.3	86.7
	You strongly agree	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

8. I resist the pressure of the management because I want to keep my job.

		Frequency	Percent	Valid Percent	Cumulative Percent
	You disagree	2	6.7	6.7	6.7
	You are neutral	12	40.0	40.0	46.7
Valid	You agree	11	36.7	36.7	83.3
	You strongly agree	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

9. I am asked to perform quickly.

		Frequency	Percent	Valid Percent	Cumulative Percent
	You disagree	1	3.3	3.3	3.3
	You agree	14	46.7	46.7	50.0
Valid	You strongly agree	15	50.0	50.0	100.0
	Total	30	100.0	100.0	

10. The manager continually requires from us to work and usually under pressure.

		Frequency	Percent	Valid Percent	Cumulative Percent
	You disagree	1	3.3	3.3	3.3
	You are neutral	1	3.3	3.3	6.7
Valid	You agree	11	36.7	36.7	43.3
	You strongly agree	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

11. Sometimes the break time partially we have to use at work.

		Frequency	Percent	Valid Percent	Cumulative Percent
	You are neutral	2	6.7	6.7	6.7
	You agree	10	33.3	33.3	40.0
Valid	You strongly agree	18	60.0	60.0	100.0
	Total	30	100.0	100.0	

12. From our work the organization where we work achieves positive results.

		Frequency	Percent	Valid Percent	Cumulative Percent
	You agree	9	30.0	30.0	30.0
Valid	You strongly agree	21	70.0	70.0	100.0
	Total	30	100.0	100.0	

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## Hospital Location Selection with Grey System Theory

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### Abstract

The facility location selection is one of the most important decisions for investors and entrepreneurs. It is a strategic issue besides often decides the fate of such a facility. In this kind of strategic decisions, decision makers should take into account various objectives and criteria and the process of location selection is inherently complicated. This paper considers the hospital location selection for a new public hospital by using Gray Relational Analysis (GRA) and Analytic Hierarchy Process (AHP). Gray Relational Analysis have been developed based on Grey System Theory. Grey System Theory is an interdisciplinary approach which first quantified by Deng in the early 1980's as an alternative method in creating the uncertainty have been proposed. The basic idea of emergence is to estimate the behavior of the systems which cannot be overcome by the stochastic or fuzzy methods with limited number of data. In this paper, the weights of criteria have been determined by using Analytic Hierarchic Process, then the grey relational degrees have been calculated for each alternative location.

**Keywords:** Gray Relational Analysis, Analytic Hierarchy Process, Location Selection.

### Introduction

Location of an establishment is the most geographically convenient place for a business in terms of raw material supply, manufacture, storage, and distribution activities as well as execution of economic objectives throughout its organizational life span (Burdurlu, 1993). For an industrial business, the location of establishment is the most convenient place for supply, manufacture, storage, and distribution functions and as well as execution of economic objectives. Although economic geographer Thunen's study in 1826 is accepted as the beginning of central place theory, operational researchers trace the roots back to Alfred Weber's book "Theory of the Location of Industries" published in 1929. (Terouhid et al., 2012). Industrial location problem gains more and more importance on the basis of advancing technology, means of transportation, and increase in population resulting in a shortage of convenient locations. Although the initial studies discuss quantitative measures like cost and distance into account, today the problem involves qualitative measures which make it much more complicated.

Finding the optimal industrial location is a strategic decision and a misjudgment creates problems in the process and directly effects cost and profitability. Therefore, in industrial location, the core principals outlined below should be considered (Kobu, 2006):

- The needs of the business should be objectively studied and the decisions should be unbiased.
- The studies should be carried out systematically, employ miscellaneous and trusted resources.
- Location studies should be conducted step by step without mixing certain stages.
- In each stage, required expert people and institutions should be identified and the ways to utilize them should be explored.

In industrial locationing issues, different objectives can be determined based on the characteristics of the problem. The objectives that are usually considered in location problems can be different. Some of them can be as follows:

- Minimizing the total setup cost.
- Minimizing the longest distance from the existing facilities.
- Minimizing fixed cost.
- Minimizing total annual operating cost.
- Maximizing service.
- Minimizing average time/ distance traveled.
- Minimizing maximum time/ distance traveled.
- Minimizing the number of located facilities.
- Maximizing responsiveness.

Recently, environmental and social objectives based on energy cost, land use and construction cost, congestion, noise, quality of life, pollution, fossil fuel crisis and tourism are becoming customary. Consequently, one of the most important difficulties to tackle these problems is to find a way to measure these criteria (Farahani et al., 2010).

As industrial locationing is a strategical decision, it is one of the most important issues in achieving long term success. Choosing a wrong location would be costly and hard to correct. Human resources, costs, proximity to customer and suppliers criteria make the industrial locationing decisions harder. These criteria fall into two categories, subjective and objective (Liang and Mao-jiun, 1991):

- Objective criteria: Financial criteria such as investment costs.
- Subjective criteria: Qualitative criteria such as finding work force and climate conditions.

Most of the time, the optimum solution of industrial locationing problems requires more than one criteria or objective function. Therefore, multi-criteria decision mechanisms are applied in industrial locationing problems. AHP was used by Viswanadham and Kameshwaran (2007) in R&D facility locationing and by Fernandes and Ruiz (2009) in industrial locationing. ANP was used by Partovi (2006) in company locationing, by Tuzkaya et al. (2008) in waste storage locationing, and Aragonés-Beltran et al. (2010) in urban solid waste facility locationing. TOPSIS method was used by Ertuğrul and Karakaşoğlu (2008) in textile manufacture facility locationing, by Awasthi (2011) in urban distribution center locationing, and by Mokhtarian and Hadi-Venchen (2012) in dairy plant locationing. ELECTRE method was used by Barda (1990) in thermal plant locationing problem, by Norese (2006) in waste incineration and disposal facility locationing, and by Ka (2011) in dry cargo harbor locationing. Keleş and Tunca (2015) used hierarchical ELECTRE method in Teknokent locationing. SMAA (stochastic multi-criteria acceptability analysis) method was used by Hokkanen et al. (1999) in harbor locationing, by Menou et al. (2010) in main distribution center for air cargo locationing. There are also hybrid applications. For instance, there are studies offering use of AHP and TOPSIS together for locationing (Yang et al, 1997; Kuo, 2002; Yong, 2006; Chou et al, 2007).

Fuzzy multi-criteria methods are also employed in locationing (Liang and Mao-jiun, 1991, Chou et al., 2008, Chou, 2010, Kahraman et al., 2003, Kaya and Çınar, 2008). Kaboli et al., (2007) used fuzzy AHP approach in plant locationing. Demirel et al. (2010) applied Choquet integral in storage locationing. Özdağoğlu (2011) used fuzzy ANP method. Momeni et al. (2011) used fuzzy VIKOR method for a plant locationing problem.

### Hospital Location Selection

The general public's demand for health is rising promptly with the improvement of the living standard. Hospitals are one of the most important infrastructural objects. The increasing population, especially in developing countries, amplifies the demand for new hospitals. Hospitals are usually funded by the public sectors, by profit or nonprofit health organizations, charities, insurance companies or even religious orders. No matter who provides the answer, where to locate a new hospital is an important question to ask. Hospital site selection plays a vital role in the hospital construction and management. From aspect of the government, appropriate hospital site selection will help optimize the allocation of medical resources, matching the provision of health care with the social and economic demands, coordinating the urban and rural health service development, and easing social contradictions. From aspect of the citizen, proper hospital site selection will improve access to the health care, reduce the time of rescue, satisfy people's medical needs as well as enhance the quality of life. From the aspect of the investors and operators of the hospital, optimum hospital site selection will definitely be cost saving on

capital strategy. It is an inevitable trend for hospitals to adopt cost accounting in order to adapt to the development of the market economy. Besides, better hospital site selection will promote the strategy of brand, marketing, differentiation and human resource, and enhance the competitiveness (Zhou et al., 2012). Hospital site selection is related to various aspects of the society. Mixed views and debates on which criteria are most important would confuse even health care experts. Previous studies were mainly classified into three categories based on the hospital type and scale as shown below:

- General hospital : Capture rate of population, current and projected population density, travel time, proximity to major commuter and public transit routes, distance from arterials, distance from other hospitals, anticipated impact on existed hospitals, land cost, contamination, socio-demographics of service area.
- Children hospital : Conformity to surrounding region, incremental operating costs, site purchase cost, travel time, proximity to public transport, traffic routes, site ownership, site shape, site gradient, ground conditions (soils/rock), access, ease of patient flow and staff movement, existing infrastructure and availability of services, perimeter buffer zone, environmental considerations, future population and prominence.
- Professional medicine and cure hospital: proximity to future expansion space, consistency with city zoning/policies, compatibility with surrounding uses, character and scale, cost of site control, helicopter access, local community preferences, accessibility, centrality, environment, land ownership, size and future population and prominence (Ali et al., 2011).

Schuurman et al. (2006) tried to define rational hospital catchments for non-urban areas based on travel-time and considered general travel time; population density; socio-demographics of service area. Wu et al. (2007) used the Delphi method, the AHP and the sensitivity analysis to develop an evaluation method for selecting the optimal location of a regional hospital in Taiwan and determining its effectiveness and considered population number, density and age profile; firm strategy, structure and rivalry; related and supporting industries; governmental policy; capital, labor and land. Vahidnia et al. (2008) used Fuzzy AHP, tried to select the optimum site for a hospital in Tehran using a GIS, while at the same time considering the uncertainty issue and considered population density; travel time; distance from arterials; land cost; contamination. Fuzzy AHP was used in similar research conducted to solve the problem of a new hospital location determination in Ankara by Aydin (2009). Soltani et al. (2011) tried to select hospital site by using two stage fuzzy multi-criteria decision making process and considered distance to arterials and major roads; distance to other medical service centers; population density; parcel size for site screening and for site selection three main criteria; traffic, parcel characteristics, land use considerations.

Selecting a location for a potential hospital often decides the success or the failure of such a facility. It is thus important to assess the locations from multiple dimensions before selecting the site. This paper focuses on the multi factor evaluation of hospital sites using AHP and GRA.

## Theoretical Background

### 1. Analytic Hierarchy Process

The Analytic Hierarchy Process (AHP) is a mathematical technique for multi-criteria decision making and is a structured technique for dealing with complex decisions. Rather than prescribing a "correct" decision. The AHP helps the decision makers find the one that best suits their needs and their understanding of the problem. Based on mathematics and psychology, it was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then. The AHP provides a comprehensive and rational framework for structuring a decision problem, representing and quantifying its elements, relating those elements to overall goals, and evaluating alternative solutions. It is used around the world in a wide variety of decision situations, in fields such as government, business, industry, healthcare, and education (El-abbadi et al.).

According to Saaty (1995), the AHP process is based on three principles of methodical process: constructing hierarchies, establishing priorities and reasonable consistency. The first step in AHP is to work on the decision problem in order to decompose it and then try to build a hierarchical structure from the criteria or sub criteria. According to Saaty (1990), decision maker should be careful with the structuring hierarchy. In order to do this, the structure should present the problem in a best way, all sides of the factors that affect the problem should be considered, all the information sources that might help the solution should be considered and all the participators who will be in the problem process should be defined (Tanyas et al., 2010).

The second step in using AHP is to set the priorities and weights for each element. The elements of each level of the hierarchy are rated using the pair wise comparison approach. The relative importance between two comparative factors is

reflected by the element values of judgment matrix. Table 1 shows general form of the measurement scale. It has relative importance in scale of 1-9 (Saaty, 1980; Güngör et al., 2014)

Table 1. Scale for pairwise comparison in AHP

Importance degree	Descriptions	Explanation
1	Equally important	Criteria i and j are of equal importance
3	Weakly important	Criteria i is weakly more important than objective j
5	Strongly important	Criteria i is strongly more important than objective j
7	Very strongly important	Criteria i is very strongly more important than objective j
9	Extremely important	Criteria i is extremely more important than objective j
2, 4, 6, 8	Intermediate values	For example, a value of 8 means that Criteria i is midway between strongly and more important than objective j

The actors' comparative decisions between the paired goals build the basic pair wise comparison according to the relative importance of one goal to another. Paired comparisons are asked to the respondents in order to define which goal or criteria in the pair are more important to him/her. Saaty's scale of measurement for the paired comparisons uses the verbal comparisons into numerical value of the scale as in Table 1.

After defining and decomposing the problem into a hierarchical structure with decision elements, the pairwise comparison matrix (A) is formed (1).

$$A = (a_{ij})_{n \times n} = \begin{bmatrix} a_{11} & \dots & a_{1n} \\ \vdots & \ddots & \vdots \\ a_{n1} & \dots & a_{nn} \end{bmatrix} \tag{1}$$

Where  $a_{ij}$  represents the judgment degree of ith factor compared to jth factor.

The weights vector ( $W_A$ ) is formed (2).

$$W_A = \begin{bmatrix} (\prod_{j=1}^n a_{1j})^{1/n} \\ (\prod_{j=1}^n a_{2j})^{1/n} \\ \vdots \\ (\prod_{j=1}^n a_{nj})^{1/n} \end{bmatrix} \tag{2}$$

The normalized weights vector ( $W'_A$ ) is then obtained as follows:

$$W'_A = \begin{bmatrix} (\prod_{j=1}^n a_{1j})^{1/n} / \sum_{i=1}^n ((\prod_{j=1}^n a_{ij})^{1/n}) \\ (\prod_{j=1}^n a_{2j})^{1/n} / \sum_{i=1}^n ((\prod_{j=1}^n a_{ij})^{1/n}) \\ \vdots \\ (\prod_{j=1}^n a_{nj})^{1/n} / \sum_{i=1}^n ((\prod_{j=1}^n a_{ij})^{1/n}) \end{bmatrix} = \begin{bmatrix} W_1 \\ W_2 \\ \vdots \\ W_n \end{bmatrix} \tag{3}$$

The last step, is checking consistency. According to Saaty (1990), consistency is not guaranteed in any measurement type. Errors in judgment are common; therefore, the consistency ratio (CR) is used to measure the consistency in pair wise comparisons. He proved that for common matrix, the largest eigen value is equal to the size of comparison matrix. The inconsistency of comparison matrix is computed as follows:

$$CI = \left( \frac{\lambda_{max} - n}{n-1} \right) \quad (4)$$

Consistency check is applied by computing the consistency ratio (CR):

$$CR = \frac{CI}{RI} \quad (5)$$

Where RI is the random index. The values of RI are shown in Table 2.

**Table 2: RI values**

n	2	3	4	5	6	7	8
RI	0	0,58	0,9	1,12	1,24	1,32	1,41

Where  $CR \leq 0.10$ , it means that the inconsistency of the pairwise comparison matrix is in desired interval and matrix is acceptable.

## 2. Grey Relational Analysis

Many systems, such as those that are social, economic, agricultural, industrial, ecological, or biological in nature, are named based on the fields and ranges to which the research subjects belong. In contrast, the name grey systems was chosen based on the colors of the subjects under investigation. For example, in control theory, the darkness of colors has been commonly used to indicate the degree of clarity of information. One of the most well accepted representations is the so-called "black box." It stands for an object with its internal relations or structure totally unknown to the investigator. Here, we use the word "black" to represent unknown information, "white" for completely known information, and "grey" for that information which is partially known and partially unknown. Accordingly, we name systems with completely known information as white systems, systems with completely unknown information as black systems, and systems with partially known and partially unknown information as grey systems, respectively.

In our daily social, economic, and scientific research activities, we often face situations involving incomplete information. For example, in some studies of agriculture, even though all the information related to the area which is planted, the quality of seeds, fertilizers, irrigation, etc., is completely known, it is still difficult to estimate the production quantity and the consequent annual income due to various unknown or vague information related to labor quality, level of technology employed, natural environment, weather conditions, etc. (Liu et. Al., 2006).

There are four possibilities for incomplete information of systems.

1. The information of elements (or parameters) is incomplete.
2. The information on structure is incomplete.
3. The information on boundary is incomplete.
4. The behavior information of movement is incomplete

Having "incomplete information" is the fundamental meaning of being "grey". In different circumstances and from different angles, the meaning of being "grey" can still be extended. For more details, see Table 3 (Liu et. Al., 2006).

**Table 3. Comparison between black, grey and white systems**

	Black	Grey	White
Information	Unknown	Incomplete	Known
Appearance	Dark	Grey	Bright
Process	New	Replace old with new	Old
Property	Chaos	Complexity	Order
Methodology	Negative	Transition	Positive
Attitude	Indulgence	Tolerance	Serenity
Conclusion	No result	Multiple solution	Unique solution

Probability and statistics, fuzzy mathematics, and grey systems theory have been the three most-often applied theories and methods employed in studies of non-deterministic systems. Even though they study objects with different uncertainties,

the commonality of these theories is their ability to make meaningful sense out of incompleteness and uncertainties. The comparison of these three theories is in the following Table 4 (Liu et. Al., 2006).

Table 4. Comparison between grey systems theory, probability, statistics and fuzzy mathematics

	Grey systems theory	Probability, statistics	Fuzzy mathematics
Objects of study	Poor information Uncertainty	Stochastic Uncertainty	Cognitive Uncertainty
Basic sets	Grey hazy sets	Cantor sets	Fuzzy sets
Methods	Information coverage	Probability distribution	Function of affiliation
Procedure	Grey series generation	Frequency distribution	Marginal sampling
Requirement	Any distribution	Typical distribution	Experience
Emphasis	Intention	Intention	Extension
Objective	Laws of reality	Laws of statistics	Cognitive expression
Characteristics	Small samples	Large samples	Experience

Grey number represents that the information of the number is insufficient and incomplete, and it belongs to a range instead of crisp value. A grey number  $g$  denotes by  $\otimes g$ .

$$\otimes g = [g^-, g^+] \tag{6}$$

Where  $g^-$ ,  $g^+$  represent the lower and upper bound of the interval. Let  $\otimes g_1$  and  $\otimes g_2$  be two grey numbers, and  $a$  be a crisp number, then the grey number arithmetic operations can be shown as follows:

$$\otimes g_1 = [g_1^-, g_1^+] \tag{7}$$

$$\otimes g_2 = [g_2^-, g_2^+] \tag{8}$$

Grey number addition

$$\otimes g_1 + \otimes g_2 = [g_1^-, g_1^+] + [g_2^-, g_2^+] = [g_1^- + g_2^-, g_1^+ + g_2^+] \tag{9}$$

Grey number subtraction

$$\otimes g_1 - \otimes g_2 = [g_1^-, g_1^+] - [g_2^-, g_2^+] = [g_1^- - g_2^+, g_1^+ - g_2^-] \tag{10}$$

Grey number multiplication

$$\otimes g_1 \cdot \otimes g_2 = [g_1^-, g_1^+] [g_2^-, g_2^+] = [\min\{g_1^- g_2^-, g_1^- g_2^+, g_1^+ g_2^-, g_1^+ g_2^+\}, \max\{g_1^- g_2^-, g_1^- g_2^+, g_1^+ g_2^-, g_1^+ g_2^+\}] \tag{11}$$

Grey number division

$$\frac{\otimes g_1}{a} = \left[ \frac{g_1^-}{a}, \frac{g_1^+}{a} \right] \tag{12}$$

$$\frac{a}{\otimes g_1} = \left[ \frac{a}{g_1^+}, \frac{a}{g_1^-} \right] \tag{13}$$

Where  $g_1^- > 0, g_1^+ > 0, g_2^- > 0, g_2^+ > 0, a > 0$ .

The grey relational analysis with grey numbers and group decision making procedure has been developed, as shown in step 1 to step 8.

**Step 1:** Assume that  $L$  experts have been invited to participate in the evaluation of the alternative. Establish the grey decision-making matrix ( $G^k$ ).

Assuming that there are  $m$  alternative characterized by  $n$  criteria, and the decision-making matrix given by the  $(k)$ th expert has been shown in Eq. (14)

$$\otimes G^k = \begin{bmatrix} \otimes g_{11}^k & \dots & \otimes g_{1n}^k \\ \vdots & \ddots & \vdots \\ \otimes g_{m1}^k & \dots & \otimes g_{mn}^k \end{bmatrix} \tag{14}$$

$$\otimes g_{ij}^k = [g_{ij}^-, g_{ij}^+], i=1,2,3,\dots,m; j=1,2,\dots,n \tag{15}$$

Where  $\otimes g_{ij}^k$  represents the value of the (j)th criterion of the (i)th alternative evaluated by the (k)th expert.

**Step 2:** Normalize the data in the decision-making matrix, the methods for data processing should be chosen according to the types of the criteria. If the larger the criteria, the better the alternative, the criteria can be called benefit-criteria, on the contrary, the larger the criteria, the worse the alternative, the criteria can be called cost-criteria.

Benefit-criteria:

$$\otimes y_{ij}^k = \frac{\otimes g_{ij}^k}{\max_{i=1}^m \{\otimes g_{ij}^{k,+}\}}, i=1,2,3,\dots,m; j=1,2,\dots,n \tag{16}$$

Cost criteria:

$$\otimes y_{ij}^k = \frac{\min_{i=1}^m \{\otimes g_{ij}^{k,-}\}}{\otimes g_{ij}^k}, i=1,2,3,\dots,m; j=1,2,\dots,n \tag{17}$$

**Step 3:** Generate the reference alternative, the normalized matrix has been shown in Eq. (18), and the reference alternative can be determined by Eqs. (19) and (20). Reference alternative is the ideal best one.

$$\otimes Y^k = \begin{bmatrix} \otimes y_{11}^k & \dots & \otimes y_{1n}^k \\ \vdots & \ddots & \vdots \\ \otimes y_{m1}^k & \dots & \otimes y_{mn}^k \end{bmatrix} \tag{18}$$

$$y^{k,0} = \{y_1^{k,0}, y_2^{k,0}, y_3^{k,0}, \dots, y_n^{k,0}\} \tag{19}$$

$$y_j^{k,0} = \max_{i=1}^m y_{ij}^{k,+}, j = 1,2,3, \dots, n \tag{20}$$

Where  $y_j^{k,0}$  is the reference value in relation to the (j)th criterion.

**Step 4:** Calculate the difference between the alternatives and the reference alternative, and construct the difference matrix by Eqs. (21) and (22).

$$\otimes \Delta^k = \begin{bmatrix} \otimes \Delta_{11}^k & \dots & \otimes \Delta_{1n}^k \\ \vdots & \ddots & \vdots \\ \otimes \Delta_{m1}^k & \dots & \otimes \Delta_{mn}^k \end{bmatrix} \tag{21}$$

$$\otimes \Delta_{11}^k = [y_j^{k,0} - y_{ij}^{k,+}, y_j^{k,0} - y_{ij}^{k,-}], i = 1,2, \dots, m; j = 1,2,3, \dots, n \tag{22}$$

**Step 5:** Calculate the grey relational coefficient for each alternative by Eqs. (23), (24) and (25).

$$\otimes \varepsilon_{ij}^k = [\otimes \varepsilon_{ij}^{k,-}, \otimes \varepsilon_{ij}^{k,+}] \tag{23}$$

$$\otimes \varepsilon_{ij}^{k,-} = \frac{\min_{i=1}^m \min_{j=1}^m \Delta_{11}^{k,-} + \rho \max_{i=1}^m \max_{j=1}^m \otimes \Delta_{11}^{k,+}}{\Delta_{11}^{k,+} + \rho \max_{i=1}^m \max_{j=1}^m \otimes \Delta_{11}^{k,+}} \tag{24}$$

$$\otimes \varepsilon_{ij}^{k,+} = \frac{\min_{i=1}^m \min_{j=1}^m \Delta_{11}^{k,-} + \rho \max_{i=1}^m \max_{j=1}^m \otimes \Delta_{11}^{k,+}}{\Delta_{11}^{k,-} + \rho \max_{i=1}^m \max_{j=1}^m \otimes \Delta_{11}^{k,+}} \tag{25}$$

Where  $\otimes \varepsilon_{ij}^k$  is the grey relational coefficient,  $\rho$  represents the distinguishing coefficient, it takes the value of 0.5 in this paper.

**Step 6:** Calculate the grey relational degree. A grey relational degree is a weighted sum of the grey relational coefficients, as shown in Eq. (26).

$$\otimes \gamma_i^k = \sum_{j=1}^n \otimes \varepsilon_{ij}^k \otimes \omega_j \tag{26}$$

Where  $\otimes \omega_j$  represents the grey weight (weighting coefficient) of the (j)th criterion.

**Step 7:** Whiten the grey relational degree and rank the alternatives. The whitening relational degree can be calculated by Eqs. (27) and (27). Rank the alternative according to the rule that the bigger the whitening relational degree, the better the corresponding alternative.

$$\otimes \gamma_i^k = [\gamma_i^{k,-}, \gamma_i^{k,+}] \quad (27)$$

$$\gamma_i^k = \frac{\gamma_i^{k,-} + \gamma_i^{k,+}}{2} \quad (28)$$

Where  $\otimes \gamma_i^k$  represents the grey relational degree and  $\gamma_i^k$  represents whitening relational degree of the (i)th alternative respectively.

**Step 8:** Carry out group decision-making. Calculate the integrated relational degrees according to Eq. (29), and rank the prior order of the alternative according to the rule that the bigger the integrated relational degree, the better the corresponding alternative.

$$\gamma_i = (\prod_{k=1}^L \gamma_i^k)^{1/L} \quad (29)$$

Where  $\gamma_i$  represents the integrated relational degree of the i(th) alternative (Manzardo et. Al., 2012).

Under many situations, the values of the quantitative and qualitative criteria are often imprecise or vague, therefore GRA, one of the sub-branches of Deng's Grey Theory (Deng, 1989). Yang et al. (2006) used a combined AHP and GRA for supplier selection problem. AHP was used to calculate relative importance weightings of qualitative criteria. Then, the qualitative and quantitative data were utilized together and obtained the grey relational grade values. The best supplier had the highest grey relational value among others. Li et al. (2007) proposed a grey-based decision-making approach to the supplier selection problem. Congjun et al. (2009) presented a study on group decision making model based on grey relational analysis. Chiang-Ku et al (2009) used ANP and GRA to evaluate the employability of graduates from department of risk management and insurance. The paper proposed a curriculum performance evaluation method combining the Analytical Network Process (ANP) and the Grey Relational Analysis (GRA). Feng et al. (2011) presented a Study on Grey Relation Analysis Based on Entropy Method in Evaluation of Logistics Center Location grey relational analysis. The weights of the evaluation indexes were defined by the entropy method. The quantitative process and comparison of the qualitative information were made by GRA. Manzardo et al. (2012) developed a grey-based group decision-making methodology for the selection of hydrogen technologies in life cycle sustainability perspective. Kose et al. (2013) suggested an integrated approach based on grey system theory for personnel selection. Birgun et al. (2014) presented a study on a multi-criteria call center site selection by hierarchy grey relational analysis and the paper dealt with an approach based on AHP and GRA for choosing the best call center site. Hashemi et al. (2015) proposed an integrated green supplier selection approach with analytic network process and improved grey relational analysis.

## Execution

In this case hospital location selection problem for a public hospital. Public benefit should be maximized whereas possible regret should be minimized in this process. In this case, GRA is recommended. The decision-makers consisted by three academics and three experts from the ministry of health. Three locations have been proposed by the governorship and the municipality for hospital site selection evaluation. These location sites are shown as  $a_1$ ,  $a_2$ , and  $a_3$ .

Many different criteria are considered for hospital site selection in many different researches and based on the considered situations for each research case. These criteria are integrated in the current research and classified into six criteria. These criteria are listed as:

- **C1: Site conditions and surrounding** ( Site size, Site preparation time, Parking: Surrounding street network to accommodate adequate parking, Proximity to banking facility, Proximity to community services, and Attractive outlook )
- **C2: Accessibility and traffic** ( Public transport link, Bicycle, Pedestrian, and Commute time for hospital staff )
- **C3: Patient/emergency access consideration** ( Helicopter access and Access to road network )
- **C4: Cost** (Site preparation cost, Operational cost, and Maintenance cost).
- **C5: Future considerations** (Expansion ability and Represent different geographic regions).
- **C6: Nuisance** (Atmosphere conditions and Noise).

The weights of these criteria calculated by using AHP. The group leader determined the weights of the criteria which is calculated by using AHP. Where CR=0.04, it means that the inconsistency of the pairwise comparison matrix is in desired interval and matrix is acceptable. The weights of the criteria are as shown in Table:5.

Table: 5 The pair-wise comparison matrix for criteria

	C1	C2	C3	C4	C5	C6	W <sub>i</sub>
C1	1	3	5	1	7	9	0,34
C2	1/3	1	3	1/3	5	7	0,17
C3	1/5	1/3	1	1/5	3	5	0,09
C4	1	3	5	1	7	9	0,34
C5	1/7	1/5	1/3	1/7	1	3	0,05
C6	1/9	1/7	1/5	1/9	1/3	1	0,03

After determining the weights of criteria, the next step is establish the grey decision-making matrix ( $G^k$ ). The grey decision-making matrix ( $G^k$ ) was established by the using decision making references as shown in Table 6. The next step, we normalized the data in the decision-making matrix and we generated the reference alternative as shown in Table 7. After normalized the data, we calculated the difference between the alternatives and the reference alternative, and construct the difference matrix as shown in Table 8. The next step we calculated the grey relational coefficient for each alternative as shown in Table 9.

Table 6: The grey decision-making matrix ( $G^k$ ).

		Accessibility and traffic	Patient/emergency access consideration	Site conditions and surrounding	Future considerations	Nuisance	Cost
<b>DM#1</b>	a <sub>1</sub>	0.8 , 1.0	0.4 , 0.6	0.4 , 0.6	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6
	a <sub>2</sub>	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8
	a <sub>3</sub>	0.8 , 1.0	0.4 , 0.6	0.6 , 0.8	0.8 , 1.0	0.6 , 0.8	0.4 , 0.6
<b>DM#2</b>	a <sub>1</sub>	0.6 , 0.8	0.8 , 1.0	0.4 , 0.6	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6
	a <sub>2</sub>	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6	0.8 , 1.0
	a <sub>3</sub>	0.4 , 0.6	0.6 , 0.8	0.8 , 1.0	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8
<b>DM#3</b>	a <sub>1</sub>	0.6 , 0.8	0.6 , 0.8	0.2 , 0.4	0.6 , 0.8	0.6 , 0.8	0.2 , 0.4
	a <sub>2</sub>	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8	0.8 , 1.0	0.6 , 0.8	0.6 , 0.8
	a <sub>3</sub>	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6	0.6 , 0.8	0.4 , 0.6	0.6 , 0.8
<b>DM#4</b>	a <sub>1</sub>	0.4 , 0.6	0.8 , 1.0	0.4 , 0.6	0.4 , 0.6	0.6 , 0.8	0.4 , 0.6
	a <sub>2</sub>	0.8 , 1.0	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6	0.4 , 0.6	0.8 , 1.0
	a <sub>3</sub>	0.8 , 1.0	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8
<b>DM#5</b>	a <sub>1</sub>	0.8 , 1.0	0.6 , 0.8	0.2 , 0.4	0.4 , 0.6	0.4 , 0.6	0.4 , 0.6
	a <sub>2</sub>	0.4 , 0.6	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6
	a <sub>3</sub>	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6	0.6 , 0.8	0.8 , 1.0	0.4 , 0.6
<b>DM#6</b>	a <sub>1</sub>	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6	0.4 , 0.6
	a <sub>2</sub>	0.6 , 0.8	0.6 , 0.8	0.4 , 0.6	0.4 , 0.6	0.2 , 0.4	0.8 , 1.0
	a <sub>3</sub>	0.8 , 1.0	0.4 , 0.6	0.4 , 0.6	0.4 , 0.6	0.6 , 0.8	0.6 , 0.8

**Table 7: Normalized decision-making matrix**

	Accessibility and traffic (Benefit)	Patient/emergency access consideration (Benefit)	Site conditions and surrounding (Benefit)	Future considerations (Benefit)	Nuisance (Benefit)	Cost (Cost)
$y^{k0}$	1.0	1.0	1.0	1.0	1.0	1.0
<b>DM#1</b>	$a_1$ 0.8 , 1.0	0.5 , 0.75	0.5 , 0.75	0.6 , 0.8	0.5 , 0.75	0.66 , 1.0
	$a_2$ 0.6 , 0.8	0.75 , 1.0	0.75 , 1.0	0.4 , 0.6	0.75 , 1.0	0.5 , 0.66
	$a_3$ 0.8 , 1.0	0.5 , 0.75	0.75 , 1.0	0.8 , 1.0	0.75 , 1.0	0.66 , 1.0
<b>DM#2</b>	$a_1$ 0.75 , 1.0	0.8 , 1.0	0.4 , 0.6	0.75 , 1.0	0.5 , 0.75	0.66 , 1.0
	$a_2$ 0.75 , 1.0	0.6 , 0.8	0.6 , 0.8	0.5 , 0.75	0.5 , 0.75	0.4 , 0.5
	$a_3$ 0.5 , 0.75	0.6 , 0.8	0.8 , 1.0	0.75 , 1.0	0.75 , 1.0	0.5 , 0.66
<b>DM#3</b>	$a_1$ 0.75 , 1.0	0.75 , 1.0	0.25 , 0.5	0.6 , 0.8	0.75 , 1.0	0.5 , 1.0
	$a_2$ 0.5 , 0.75	0.75 , 1.0	0.75 , 1.0	0.8 , 1.0	0.75 , 1.0	0.25 , 0.66
	$a_3$ 0.75 , 1.0	0.5 , 0.75	0.5 , 0.75	0.6 , 0.8	0.5 , 0.75	0.25 , 0.66
<b>DM#4</b>	$a_1$ 0.4 , 0.6	0.8 , 1.0	0.5 , 0.75	0.5 , 0.75	0.75 , 1.0	0.66 , 1.0
	$a_2$ 0.8 , 1.0	0.6 , 0.8	0.5 , 0.75	0.5 , 0.75	0.5 , 0.75	0.4 , 0.5
	$a_3$ 0.8 , 1.0	0.4 , 0.6	0.75 , 1.0	0.75 , 1.0	0.75 , 1.0	0.5 , 0.66
<b>DM#5</b>	$a_1$ 0.8 , 1.0	0.75 , 1.0	0.25 , 0.5	0.5 , 0.75	0.4 , 0.6	0.66 , 1.0
	$a_2$ 0.4 , 0.6	0.5 , 0.75	0.75 , 1.0	0.75 , 1.0	0.6 , 0.8	0.66 , 1.0
	$a_3$ 0.6 , 0.8	0.75 , 1.0	0.5 , 0.75	0.75 , 1.0	0.8 , 1.0	0.66 , 1.0
<b>DM#6</b>	$a_1$ 0.4 , 0.6	0.75 , 1.0	0.75 , 1.0	0.66 , 1.0	0.5 , 0.75	0.66 , 1.0
	$a_2$ 0.6 , 0.8	0.75 , 1.0	0.5 , 0.75	0.66 , 1.0	0.25 , 0.5	0.4 , 0.5
	$a_3$ 0.8 , 1.0	0.5 , 0.75	0.5 , 0.75	0.66 , 1.0	0.75 , 1.0	0.5 , 0.66

**Table 8: The difference matrix**

$\Delta^k$	Accessibility and traffic	Patient/emergency access consideration	Site conditions and surrounding	Future considerations	Nuisance	Cost
$y^{k0}$	1.0	1.0	1.0	1.0	1.0	1.0
<b>DM#1</b>	$a_1$ 0 , 0.2	0.25 , 0.5	0.25 , 0.5	0.2 , 0.4	0.25 , 0.5	0 , 0.34
	$a_2$ 0.2 , 0.4	0 , 0.25	0 , 0.25	0.4 , 0.6	0 , 0.25	0.34 , 0.5
	$a_3$ 0 , 0.2	0.25 , 0.5	0 , 0.25	0 , 0.2	0 , 0.25	0 , 0.34
<b>DM#2</b>	$a_1$ 0 , 0.25	0 , 0.2	0.4 , 0.6	0 , 0.25	0.25 , 0.5	0 , 0.34
	$a_2$ 0 , 0.25	0.2 , 0.4	0.2 , 0.4	0.25 , 0.5	0.25 , 0.5	0.5 , 0.6
	$a_3$ 0.25 , 0.5	0.2 , 0.4	0 , 0.2	0 , 0.25	0 , 0.25	0.34 , 0.5
<b>DM#3</b>	$a_1$ 0 , 0.25	0 , 0.25	0.5 , 0.75	0.2 , 0.4	0 , 0.25	0 , 0.5
	$a_2$ 0.25 , 0.5	0 , 0.25	0 , 0.25	0 , 0.2	0 , 0.25	0.34 , 0.75
	$a_3$ 0 , 0.25	0.25 , 0	0.25 , 0.5	0.2 , 0.4	0.25 , 0.5	0.34 , 0.75
<b>DM#4</b>	$a_1$ 0.4 , 0.6	0 , 0.2	0.25 , 0.5	0.25 , 0.5	0 , 0.25	0 , 0.34
	$a_2$ 0 , 0.2	0.2 , 0.4	0.25 , 0.5	0.25 , 0.5	0.25 , 0.5	0.5 , 0.6
	$a_3$ 0 , 0.2	0.4 , 0.6	0 , 0.25	0 , 0.25	0 , 0.25	0.34 , 0.5
<b>DM#5</b>	$a_1$ 0 , 0.2	0 , 0.25	0.5 , 0.75	0.25 , 0.5	0.4 , 0.6	0 , 0.34
	$a_2$ 0.4 , 0.6	0.25 , 0.5	0 , 0.25	0 , 0.25	0.2 , 0.4	0 , 0.34
	$a_3$ 0.2 , 0.4	0 , 0.25	0.25 , 0.5	0 , 0.25	0 , 0.2	0 , 0.34
<b>DM#6</b>	$a_1$ 0.4 , 0.6	0 , 0.25	0 , 0.25	0 , 0.34	0.25 , 0.5	0 , 0.34
	$a_2$ 0.2 , 0.4	0 , 0.25	0.25 , 0.5	0 , 0.34	0.5 , 0.75	0.5 , 0.6
	$a_3$ 0 , 0.2	0.25 , 0.5	0.25 , 0.5	0 , 0.34	0 , 0.25	0.34 , 0.5

**Table 9: The grey relational coefficient**

		Accessibility and traffic	Patient/emergency access consideration	Site conditions and surrounding	Future considerations	Nuisance	Cost
	$\otimes e_{ij}^k$						
	$W_i$	<b>0.166</b>	<b>0.089</b>	<b>0.336</b>	<b>0.047</b>	<b>0.026</b>	<b>0.336</b>
<b>DM#1</b>	$a_1$	0.56 , 1	0.33 , 0.5	0.33 , 0.5	0.38 , 0.56	0.33 , 0.5	0.42 , 1
	$a_2$	0.38 , 0.56	0.5 , 1	0.5 , 1	0.29 , 0.38	0.5 , 1	0.33 , 0.42
	$a_3$	0.56 , 1	0.33 , 0.5	0.5 , 1	0.56 , 1	0.5 , 1	0.42 , 1
<b>DM#2</b>	$a_1$	0.55 , 1	0.6 , 1	0.33 , 0.43	0.55 , 1	0.38 , 0.55	0.47 , 1
	$a_2$	0.55 , 1	0.43 , 0.6	0.43 , 0.6	0.38 , 0.55	0.38 , 0.55	0.33 , 0.38
	$a_3$	0.38 , 0.55	0.43 , 0.6	0.6 , 1	0.55 , 1	0.55 , 1	0.38 , 0.47
<b>DM#3</b>	$a_1$	0.75 , 1	0.75 , 1	0.38 , 0.43	0.58 , 0.65	0.75 , 1	0.5 , 1
	$a_2$	0.5 , 0.6	0.75 , 1	0.75 , 1	0.83 , 1	0.75 , 1	0.38 , 0.52
	$a_3$	0.75 , 1	1.5 , 0.6	0.5 , 0.6	0.58 , 0.65	0.5 , 0.6	0.38 , 0.52
<b>DM#4</b>	$a_1$	0.33 , 0.43	0.6 , 1	0.38 , 0.55	0.38 , 0.55	0.55 , 1	0.47 , 1
	$a_2$	0.6 , 1	0.43 , 0.6	0.38 , 0.55	0.38 , 0.55	0.38 , 0.55	0.33 , 0.38
	$a_3$	0.6 , 1	0.33 , 0.43	0.55 , 1	0.55 , 1	0.55 , 1	0.38 , 0.47
<b>DM#5</b>	$a_1$	0.65 , 1	0.6 , 1	0.33 , 0.43	0.43 , 0.6	0.38 , 0.48	0.52 , 1
	$a_2$	0.38 , 0.48	0.43 , 0.6	0.6 , 1	0.6 , 1	0.48 , 0.65	0.52 , 1
	$a_3$	0.48 , 0.65	0.6 , 1	0.43 , 0.6	0.6 , 1	0.65 , 1	0.52 , 1
<b>DM#6</b>	$a_1$	0.38 , 0.48	0.6 , 1	0.6 , 1	0.52 , 1	0.43 , 0.6	0.52 , 1
	$a_2$	0.48 , 0.65	0.6 , 1	0.43 , 0.6	0.52 , 1	0.33 , 0.43	0.38 , 0.43
	$a_3$	0.65 , 1	0.43 , 0.6	0.43 , 0.6	0.52 , 1	0.6 , 1	0.43 , 0.52

Then we calculated the grey relational degree. A grey relational degree is a weighted sum of the grey relational coefficients. Where  $\otimes \gamma_i^k$  represents the grey relational degree and  $\gamma_i^k$  represents whitening relational degree of the i(th) alternative respectively as shown in Table 10. The last step is calculating the integrated relational degrees according to Eq. (29), and rank the prior order of the alternative according to the rule that the bigger the integrated relational degree, the better the corresponding alternative as shown in Table 11.

Table 10: The grey relational degree

		$\gamma_1^{k-}$	$\gamma_1^{k+}$	$\gamma_1^*$
<b>DM#1</b>	$a_1$	0.403005	0.753611	0.578308
	$a_2$	0.41517	0.703672	0.559421
	$a_3$	0.471373	0.9555	0.713436
<b>DM#2</b>	$a_1$	0.448832	0.796182	0.622507
	$a_2$	0.412063	0.586818	0.499441
	$a_3$	0.467811	0.710445	0.589128
<b>DM#3</b>	$a_1$	0.531865	0.791652	0.661759
	$a_2$	0.586417	0.773824	0.68012
	$a_3$	0.592115	0.643476	0.617796
<b>DM#4</b>	$a_1$	0.42404	0.731052	0.577546
	$a_2$	0.403118	0.568491	0.485804
	$a_3$	0.478358	0.770643	0.6245
<b>DM#5</b>	$a_1$	0.480028	0.775781	0.627904
	$a_2$	0.520593	0.869679	0.695136
	$a_3$	0.499103	0.807861	0.653482
<b>DM#6</b>	$a_1$	0.530863	0.903923	0.717393
	$a_2$	0.44027	0.601004	0.520637
	$a_3$	0.474654	0.670224	0.572439

Table 11: Integrated relational degree

$a_1$	0.629081183
$a_2$	0.567517327
$a_3$	0.626831599

### Conclusion

Hospital location site selection problem turns into a complicated problem that one decision-maker cannot handle as amount of the investment increases. In this case, personal expertise is not enough and the subject should be examined from different angles. Therefore, the problem was handled by group decision making method as the information and experience provided by the persons would be more than one person's information and experience and this would increase the effectiveness of the decision. Location site selection is a strategical decision and a mistake would be very hard to correct. As a result of the study alternative 1 ( $a_1$ ) was selected by the group. As you see  $a_1$  and  $a_3$  had very close value.  $a_1$  and  $a_3$  are very close places and nearly same size, so the result did not surprise us too much.

### References

- [1] Ali, S., Ebrahim, Z.M., (2011). Hospital site selection using two-stage fuzzy multi-criteria decision making process. *Journal of Urban and Environmental Engineering* 5(1), 32–43
- [2] Aragonés-Beltrán, P., Pastor-Ferrando, J. P., García-García, F., & Pascual-Agulló, A. (2010). An Analytic Network Process approach for siting a municipal solid waste plant in the Metropolitan Area of Valencia (Spain). *Journal of Environmental Management*, 91(5), 1071-1086. doi:10.1016/j.jenvman.2009.12.007
- [3] Awasthi, A., Chauhan, S., & Goyal, S. (2011). A multi-criteria decision making approach for location planning for urban distribution centers under uncertainty. *Mathematical & Computer Modelling*, 53(1/2), 98-109. doi:10.1016/j.mcm.2010.07.023
- [4] Aydın, Özlem (2009). Hospital Location for Ankara with Fuzzy AHP. *Dokuz Eylül Üniversitesi*
- [5] Barda, O. H., Dupuis, J., & Lencioni, P. (1990). Multi-criteria location of thermal power plants. *European Journal of Operational Research*, 45(2/3), 332-346.
- [6] Birgun, S., & Gungor, C. (2014). A multi-criteria call center site selection by hierarchy grey relational analysis. *Journal of Aeronautics & Space Technologies / Havacılık Ve Uzay Teknolojileri Dergisi*, 7(1), 45-52.
- [7] Burdurlu, E., (2003). Location Choice For Furniture Industry Firms By Using Analytic Hierarchy Process (AHP) Method. *Gazi Üniversitesi Fen Bilimleri Dergisi*, 16 (2), 1-9
- [8] Chou, C.C. (2010). Application of a Fuzzy MCDM Model to the Evaluation of Plant Location. *International Journal of Innovative Computing Information and Control*, 6(6): 2581-2594.
- [9] Chou, S.Y., Chang, Y.H., Shen, C.Y. (2008). A Fuzzy Simple Additive Weighting System Under group Decision-Making for Facility Location Selection with Objective/Subjective Attributes. *European Journal of Operational Research*, 189(1): 132-145.

- [10] Demirel, T., Demirel, N., & Kahraman, C. (2010). Multi-criteria warehouse location selection using Choquet integral. *Expert Systems with Applications*, 37(5), 3943-3952. doi:10.1016/j.eswa.2009.11.022
- [11] Deng, J. L., (1989) "Introduction to Grey System", *Journal of Grey System*, 1(1), 1-24.
- [12] El-Abadi, N. K., & El-Abadi, A. N. Develeoping measurements for steganography covers.
- [13] Ertuğrul, İ., & Karakaşoğlu, N. (2008). Comparison of fuzzy AHP and fuzzy TOPSIS methods for facility location selection. *International Journal of Advanced Manufacturing Technology*, 39(7/8), 783-795. Doi:10.1007/s00170-007-1249-8
- [14] Fan, C., Tsai, H., & Peng, J. (2009). Using ANP and GRA to evaluate the employability of graduates from department of risk management and insurance. *Journal of Grey System*, 21(1), 71-84.
- [15] Farahani, R.Z., SteadieSeifi, M., & Asgari, N. (2010). Review Article: Multiple criteria facility location problems: A survey. *Applied Mathematical Modelling*, 341689-1709. doi:10.1016/j.apm.2009.10.005
- [16] Feng, L., Yuan, R., (2011). Study on Grey Relation Analysis Based on Entropy Method in Evaluation of Logistics Center Location. *Third International Conference on Measuring Technology and Mechatronics Automation*, Vol. 3, 474-477.
- [17] Fernández, I., & Ruiz, M. (2009). Descriptive model and evaluation system to locate sustainable industrial areas. *Journal of Cleaner Production*, 17(1), 87-100. doi:10.1016/j.jclepro.2008.02.011
- [18] Gungor, C., & Birgun, S. (2014). A multi-criteria call center site selection by hierarchy grey relational analysis. *Journal of Aeronautics and Space Technologies*, 7(1), 45-52.
- [19] Hashemi, S. H., Karimi, A., & Tavana, M. (2015). An integrated green supplier selection approach with analytic network process and improved Grey relational analysis. *International Journal of Production Economics*, 159178-191. doi:10.1016/j.ijpe.2014.09.027
- [20] Hokkanen, J., Lahdelma, R., Salminen, P., (1999). A Multiple Criteria Decision Model for Analyzing and Choosing Among Different Development Patterns for the Helsinki Cargo Harbor. *Socio-Economic Planning Sciences*, 33, 1, 1999, 1-23.
- [21] Ka, B. (2011). Application of Fuzzy AHP and ELECTRE to China Dry Port Location Selection. *The Asian Journal of Shipping and Logistics*, 27, 2, 2011, 331-353.
- [22] Kaboli, A., Aryanezhad, M., Shahanaghi, K. and Niroomand, I. (2007). A New Method for Plant Location Selection Problem: A Fuzzy-AHP Approach. *Systems, Man and Cybernetics. ISIC. IEEE International Conference*, 582-585.
- [23] Kahraman, C., Ruan, D., Dogan, I. (2003). Fuzzy Group Decision-Making Forfacility Location Selection. *Information Sciences*, 157: 135-153.
- [24] Kaya, I., Çınar, D. (2007). Facility Location Selection Using a Fuzzy Outranking Method. *Journal of Multiple-Valued Logic & Soft Computing*. 2008, Vol. 14 Issue 3-5, p251-263.
- [25] Keles, M. K., & Tunca, M. Z. (2015). Hiyerarşik Electre Yönteminin Teknokent Yönetiminin Teknokent Seçiminde Kullanımı Üzerine Bir Çalışma. *Suleyman Demirel University Journal of Faculty of Economics & Administrative Sciences*, 20(1), 199-223.
- [26] Kobu, B. (2013). Üretim Yönetimi, Genişletilmiş ve Güncellenmiş 16. Baskı, *Beta Basım Yayım Dağıtım A.Ş.*, Şubat, İstanbul.
- [27] Köse, E., APLAK, H. S., & KABAK, M. (2013). Personel Seçimi için Gri Sistem Teori Tabanlı Bütünleşik Bir Yaklaşım. *Ege Academic Review*, 13(4), 461-471.
- [28] Kuo, R.J., Chi, S.C. Kao, S.S. (2002). A decision support system for selecting convenience store location through integration of fuzzy AHP and artificial neural network. *Computers in Industry*, 199-214.
- [29] Li, G., Yamaguchi, D., & Nagai, M. (2007). A grey-based decision-making approach to the supplier selection problem. *Mathematical and Computer Modelling*, 46573-581. doi:10.1016/j.mcm.2006.11.021
- [30] Liang, G.S., Mao-Jiun, J. (1991). A Fuzzy Multi- Criteria Decision-Making Method for Facility Site Selection. *The International Journal of Production Research*, 29(11): 2313-2330.

- [31] Manzardo, A., Ren, J., Mazzi, A., & Scipioni, A. (2012). A grey-based group decision-making methodology for the selection of hydrogen technologies in life cycle sustainability perspective. *International Journal of Hydrogen Energy*, 37(17), 17663-17670. doi:10.1016/j.ijhydene.2012.08.137
- [32] Menou, A., Benallou, A., Lahdelma, R., & Salminen, P. (2010). Decision support for centralizing cargo at a Moroccan airport hub using stochastic multicriteria acceptability analysis. *European Journal of Operational Research*, 204(3), 621-629. doi:10.1016/j.ejor.2009.11.021
- [33] Mokhtarian, M.N. & Hadi-Vencheh, A. (2012). A New Fuzzy TOPSIS Method Based On Left and Right Scores: An Application for Determining an Industrial Zone for Dairy Products Factory. *Applied Soft Computing*, 12, 8, 2012, 2496-2505
- [34] Momeni, M., Fathi, M.R. ve Kashaf, M. (2011). A Fuzzy VIKOR Approach for Plant Location Selection. *Journal of American Science*, 7 (9):766-771.
- [35] Norese, M.F. (2006). ELECTRE III as a Support for Participatory Decision-Making on the Localization of Waste-Treatment Plants. *Land Use Policy*, 23, 1, 2006, 76-85.
- [36] Ozdagoglu, A. (2012). A multi-criteria decision-making methodology on the selection of facility location: fuzzy ANP. *The International Journal of Advanced Manufacturing Technology*, (5-8), 787.
- [37] Partovi, F. Y. (2006). An analytic model for locating facilities strategically. *Omega*, 34(1), 41-55. doi:10.1016/j.omega.2004.07.018
- [38] Rao, C., Li, C., Li, W., & Peng, J. (2009). Group decision making model based on grey relational analysis. *Journal of Grey System*, 21(1), 15-24.
- [39] Saaty, T.L. (1980). *The Analytic Hierarchy Process*, McGraw-Hill, New York.
- [40] Saaty, T.L. (1990). *Multicriteria Decision Making: The Analytic Hierarchy Process*. RWS Publications, Pittsburg
- [41] Saaty, T.L. (1995). *Decision Making for Leaders*. RWS Publications, Pittsburg
- [42] Schuurman, N., Fiedler, R. S., Grzybowski, S. W., & Grund, D. (2006). Defining rational hospital catchments for non-urban areas based on travel-time. *International Journal of Health Geographics*, 5, 43-53. Doi:10.1186/1476-072X-5-43
- [43] Soltani, A., Marandi, E.Z. (2011). Hospital site selection using two stage fuzzy multicriteria decision making process. *Journal of Urban and environmental engineering*, Vol.5 No. 1, pp. 32-43.
- [44] Tanyas, M., Candan, C., & Cesur, K. (2010). Supply Chain Management in Textile and Supplier Performance Evaluation. In *10th Global Conference on Business & Economics*, Rome, Italy.
- [45] Tuzkaya, G., Onüt, S., Tuzkaya, U. R., & Gülsün, B. (2008). An analytic network process approach for locating undesirable facilities: an example from Istanbul, Turkey. *Journal of Environmental Management*, 88(4), 970-983.
- [46] Vahidnia, M. H., Alesheikh, A. A., & Alimohammadi, A. (2009). Hospital site selection using fuzzy AHP and its derivatives. *Journal of Environmental Management*, 90(3), 408-416. doi:10.1016/j.jenvman.2009.04.010
- [47] Viswanadham N, Kameshwaran S (2007). A decision framework for location selection in global supply chains. *Proceedings of the 3rd Annual IEEE Conference on Automation Science and Engineering* Scottsdale, AZ, USA, Sept 22-25, 2007, pp 704-709
- [48] Wu, C., Lin, C., & Chen, H. (2007). Optimal selection of location for Taiwanese hospitals to ensure a competitive advantage by using the analytic hierarchy process and sensitivity analysis. *Building and Environment*, 42(3), 1431-1444. doi:10.1016/j.buildenv.2005.12.016
- [49] Wu, J., & Zhou, L. (2012). GIS-Based Multi-Criteria Analysis for Hospital Selection in Haidian District of Beijing.
- [50] Yang, C. C., Chen, B. S., (2006). Supplier Selection Using Combined Analytical Hierarchy Process and Grey Relational Analysis. *Journal of Manufacturing Technology Management*, 17(7): 926-941.
- [51] Yang, J., Lee, H. (1997). An AHP decision model for facility location selection. *Facilities*, 15(9): 241-254 (1997).
- [52] Yong D. (2006). Plant Location Selection Based on Fuzzy TOPSIS. *The International Journal of Advanced Manufacturing Technology*, 28, 839-844

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## Integer Programming Model for Two-Centered Double Traveling Salesman Problem

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### Abstract

Traveling Salesman Problem (TSP) is among the most popular combinatorial problems and has been widely studied with many extensions in the literature. There have been integer programming formulations and solution approaches for TSP and its variations. One of the most popular topics is the multiple TSP (m-TSP). It has been started to work on the last decades. Generally, m-TSP has a single depot and more than one tour. However, some types have more than one depot. Besides, if seeking, many encounter with double traveling salesman problem (d-TSP). As inferred from the literature, d-TSP is a variation of m-TSP in which two salespersons operate in parallel. They start and end either in a single or two depots. Apart from the literature, a new TSP model has been constructed in this study. The model analyzes the behaviors of traveling salesmen both in the main and secondary tour. Tours have been aggregated via single node existing in the secondary tour. In the application part, Simulated Annealing (SA) was used to optimize the traveling paths of salesmen. The objective parameters of both tours have been explored within a numerical example. According to them, several cost values have been found. The optimum parameters and costs of both tours are to be determined and some practical issues relevant to the behaviors of traveling salesmen have been given. Results suggest that alternative travel plans of traveling salesmen could be possible. Also, findings give hints about both tours and their characteristics.

**Keywords:** Double Traveling Salesman Problem, Integer Programming, Combinatorial Optimization.

### 1. Introduction

The traveling salesman problem is among the popular topics in the field of combinatorial optimization. The salesman has an objective to minimize the travel distance by visiting each city only once. The complexity of TSP grows exponentially as number of nodes increases. If huge number of nodes exist, TSP gets substantially hard. Therefore, new techniques and methodologies have been developed so as to solve TSP effectively. Heuristic and metaheuristic solution procedures are the most accepted ones to cope with TSPs. TSP covers many sub-topics which have close relations with other complex structured routing problems. By the way, TSP (decision version) is NP-complete problem. TSP is also in class NP and many other problems, such as satisfiability problem (SAT), clique problem, vertex cover problem and hamiltonian path problem reduce to TSP decision problem (Farahani & Hekmatfar (eds.), 2009, p. 33-34). Basically, TSP has two widely researched variants, named as traveling purchaser problem (TPP) and vehicle routing problem (VRP). Those are applicable and useful for operations research and especially in the field of many industries. Other than TPP and VRP, m-TSP is another form of TSP in which more than one salesman operates through multiple paths. Bektas (2006) gives some formulations and solution procedures for m-TSP. Although there exist quite more publications upon TSP and VRP, m-TSP has less attention in the literature. Possible variations of m-TSP are classified by number of depots, number of salesmen, the number of salesmen having fixed charges, time windows and the other special constraints. One of the most widely studied m-TSP is double traveling salesman problem (d-TSP). In d-TSP, some types have two depots and two salesmen operate independently. Other types have single depot and they return to the original depot. If the salesmen being used in optimization are not stated, then each salesman usually has an associated fixed cost incurring whenever this salesman used in this solution. On the other hand, number of tours is fixed in d-TSP. D-TSP has two tours in all cases.

In this research, a new model has been proposed for d-TSP, named as two centered d-TSP (tcd-TSP). The reason of using this term is the existing of two depots (centers) which are waiting to be selected among other nodes. One of them is the home depot of primary tour and the other is the home depot of secondary tour. Therewithal, the second center is the aggregation point of both tours. To be clear, the model investigates the relative status of primary and secondary paths. Hence, two parameters are set to evaluate both tours and their characteristics. Eventually, the optimum traveling plan and the optimum parameters for tcd-TSP are to be found out.

## 2. Literature Research

There has been wide range of publication upon TSP and its variations. Burkard, Deineko, van Dal, van der Veen and Woeginger (1998) write a survey upon special cases of the TSP. They mention about symmetric and asymmetric matrices, euclidean TSP and the various special cases of the TSP. One of the leading classifications is depending on data whether to be symmetric or asymmetric. In symmetric TSP (s-TSP), the cost measure  $d_{ij} = d_{ji}$  associated with edge  $(i, j) \in A$  is valid for all pair of points. If  $d_{ij} \neq d_{ji}$  for at least one, then the TSP becomes asymmetric TSP (a-TSP). Several a-TSP formulations are given in (Oncan, Altinel & Laporte, 2009). There have been recently found many publications on the two types of TSP worked out through heuristics. To solve the well-known symmetric and asymmetric TSPs, a new version of bat algorithm is introduced in (Osaba, Yang, Diaz, Lopez-Garcia & Carbelledo, 2016). Brest and Zerovnik (2005) developed a heuristic algorithm for the a-TSP and studied with instances from TSPLIB library. A new genetic algorithm for asymmetric version is proposed and solved on benchmark instances in (Nagata & Soler, 2012). The other widely studied classification is depending on the number of tours in the problem. The number of tours can be single, double or multiple. In this context, m-TSP can be defined as in (Bektas, 2006, p. 209-210): In a given of nodes, let there are m salesmen located at a single depot node. The remaining nodes that are to be visited are intermediate nodes. Then the m-TSP consists of finding tours for all m salesmen, who all start and end at the depot such that each intermediate node is visited exactly once and the total cost of visiting all nodes is minimized. The cost metric can be defined in terms of distance, time etc. The basic extensions of m-TSP are also touched upon in this section. Since TSP is a special version of m-TSP, if one tour exists, m-TSP reduces to the TSP. If double tour exists, m-TSP reduces to the d-TSP. Likewise, the other versions of m-TSP can be obtained as the number of tours in the problem changes. There has been limited number of publication upon m-TSP and its extensions. In this study, some of the important ones are given. Kara and Bektas (2006) give some integer programming formulations for m-TSP and its variations. They show that the solution of multidepot m-TSP with the proposed formulation is significantly superior to previous approaches. Cheang, Gao, Lim, Qin and Zhu (2012) extend the TSP with pick-up delivery and LIFO loading (TSPPDL) by considering two additional factors, the use of multiple vehicles and a limitation on the total distance that a vehicle can travel. Chan and Baker (2005) consider the multiple depots multiple TSFLP expanded to include vehicle range and multiple service frequency requirements. Artificial intelligence has started to play an important role in solving m-TSP. By using genetic algorithm and evolutionary programming, a new methodology for m-TSP was developed in several studies (Carter & Ragsdale, 2006; Kota & Jarmai, 2015; Yuan, Skinner, Huang & Liu, 2013). Modares, Somhom and Enkawa (1999) propose an algorithm for TSP based on self organizing neural network approach and extend it to m-TSP. In the following researches (Mladenovic, Urosevic, Hanafi & Ilic, 2012; Soylyu, 2015), VNS approach was used to solve m-TSP. As mentioned before, one of the important extensions of m-TSP is the d-TSP. Plebe and Anile (2002) developed an algorithm and applied a neural network based approach to d-TSP. One of the most common research topics of d-TSP is the d-TSP with multiple stacks (d-TSPMS). There have been quite a lot of publications in this version. Petersen and Madsen (2009) introduce the problem and present four different metaheuristic approaches to its solution. Efficient algorithms for the problem are presented in (Cazassa, Ceselli & Nunkesser, 2012) and exact methods for the problem are developed in (Iori & Ledesma, 2015). Petersen, Archetti and Sprezza (2010) present mathematical formulations and solution approaches for the problem. It can be counted more publications in relation to d-TSP and its extensions.

The remainder of the paper is organized as follows: Section 3 formally introduces the tcd-TSP and gives the integer programming formulation. In Section 4, a simulated annealing based algorithm for the problem is proposed and the model is tested for a group of parameters and findings are given. Finally, Section 5 summarizes and comments on the contribution of this paper.

**3. Mathematical Model for tcd-TSP**

As mentioned in introduction part, a new mathematical model has been developed in this section. In tcd-TSP, the problem has two center points selecting among nodes and tours are aggregated via single node existing in the secondary tour. The center points are represented as the home depots of the tours. Thus, the optimum solution changes as the home depots change. In addition, each travel path is set by a parameter. Thence, the optimum solution is also affected by the objective parameters. In light of this information, the basic tcd-TSP can be formulated as follows:

Description of Sets:

$$N = \{1, 2, \dots, p_1, \dots, n\}$$

$$M = \{n + 1, n + 2, \dots, p_2, \dots, m\}$$

$$R = N \cup M$$

Parameters:

- $\alpha$  : cost parameter of primal tour
- $\beta$  : cost parameter of secondary tour
- $c_{ij}$  : distance value between city  $i$  and  $j$  in the primal tour
- $d_{ij}$  : distance value between city  $i$  and  $j$  in the secondary tour

Decision Variables:

$$x_{ij} = \begin{cases} 1, & \text{if salesman travels between city } i \text{ and } j \\ 0, & \text{otherwise} \end{cases}$$

$$\text{Min } Z = \alpha * \sum_{i,j \in N \cup \{p_2\}}^n \sum_{N \cup \{p_2\}}^n c_{ij} * x_{ij} + \beta * \sum_{i,j \in M}^m \sum_M^m d_{ij} * x_{ij}$$

s.t.

$$\sum_{j \in N \cup \{p_2\}}^n x_{ji} = 1 \quad \forall i \in N \cup \{p_2\} \tag{1}$$

$$\sum_{j \in N \cup \{p_2\}}^n x_{ij} = 1 \quad \forall i \in N \cup \{p_2\} \tag{2}$$

$$\sum_{j \in M}^m x_{ji} = 1 \quad \forall i \in M \tag{3}$$

$$\sum_{j \in M}^m x_{ij} = 1 \quad \forall i \in M \tag{4}$$

$$\sum_{i \in S_1} \sum_{j \notin S_1} x_{ij} \geq 1 \quad |S_1| \geq 2 \wedge S_1 \subset N \cup \{p_2\} \tag{5}$$

$$\sum_{i \in S_2} \sum_{j \notin S_2} x_{ij} \geq 1 \quad |S_2| \geq 2 \wedge S_2 \subset M. \tag{6}$$

$$\forall x_{ij} \in \{0, 1\} \quad \exists (i, j) \in N \cup \{p_2\} \wedge \exists (i, j) \in M \tag{7}$$

In the model formulation, objective function minimizes the total cost of two salesmen in terms of distance. Equations (Eqs.) (1) and (2) are the degree constraints for the primal tour. Eqs. (3) and (4) are the degree constraints for secondary tour. Inequalities (Ineq.) (5) and (6) are the subtour elimination constraints for tour 1 and 2, respectively. Expression (7) gives decision variables and states that some of the nodes belong to primary tour and the remaining belongs to the other one. The integer programming formulation has  $n^2+n+m^2-m$  zero-one decision variables and  $2^{n+1}+2^m+n+m$  constraints for each model constructed because of the unknown location of transfer point. In total, there exist  $mn^2+m^3+mn-m^2$  zero-one decision

variables and  $m2^{n+1}+m2^m+mn+m^2$  constraints in the integer programming model. Thus, the formulation has  $O(mn^2)$  integer variables and  $O(m2^{n+1})$  constraints if inequality  $n \geq m$  is hold. The tcd-TSP formulation has approximately the four thousand variables and twenty million inequalities when  $n=20$ ,  $m=10$ .

The proposed integer programming model for tcd-TSP is convenient for tourism organizations, cargo and freight transportation by all modes, the design of two-piece objects, fixing the transfer/transshipment points and depot locations and etc.

#### 4. Application of the SA Algorithm for the tcd-TSP

Kirkpatrick, Gelatt, and Vecchi (1983) introduced the simulated annealing algorithm which attempts to solve hard combinatorial optimization problems in operational research area by using the annealing process of hard metals. The authors found out the relation between the annealing process and optimization. Thereafter, they formulated the relation in compact form and it has begun to apply in many optimization problems. In this section, a neighborhood structure has been developed and embedded in SA algorithm. Here, also a distinct objective function is evaluated for two interrelated tours. This structure is peculiar to tcd- TSP. As explained clearly, the overall steps of SA are given below:

##### 4. 1. Steps of the SA Algorithm for tcd-TSP

*Step 1.* Select the initial tours A and B, objective parameters  $\alpha$  and  $\beta$ , iteration limit K, the iteration limit L for temperature change, initial temperature  $T_0$ , cooling rate  $r$  ( $0 < r < 1$ ). Global solution  $A^* = A^1$ ,  $B^* = B^1$ , global index  $k=1$  and iteration counter  $l=1$ .

*Step 2.* Select a point randomly from secondary tour B and fix it as transfer point between A and B. Revise the primal tour A including the home depot location.

*Step 3.* Define two indices for both tours separately and exchange the points represented by them. For instance, indices a, b for A and indices d, e for B. Calculate the net improvement as  $\Delta Z = \left| Z(\alpha^* A^k + \beta^* B^k) - Z(\alpha^* A^{k+1} + \beta^* B^{k+1}) \right|$ . It should be here noticed that alpha and beta can get out of the brackets since they are parameters.

*Step 4.* If  $\Delta Z \geq 0$  (min.), then accept the solution and update it. Go to step 6, otherwise go to step 5.

*Step 5.* If  $P = \exp\left[-\frac{\left| Z(\alpha^* A^{k+1} + \beta^* B^{k+1}) - Z(\alpha^* A^k + \beta^* B^k) \right|}{T_k}\right] \geq 0.5$  then update  $A^{k+1} = A^k + \Delta A^{k+1}$  and  $B^{k+1} = B^k + \Delta B^{k+1}$ , otherwise update  $A^{k+1} = A^k$  and  $B^{k+1} = B^k$ . Go to step 7.

*Step 6.* If the objective value  $Z(\alpha^* A^{k+1} + \beta^* B^{k+1})$  is superior to global objective value, update the global solutions  $A^* = A^{k+1}$  and  $B^* = B^{k+1}$ .

*Step 7.*  $k = k + 1, l = l + 1$ . If  $l = L$  take  $l = 1$  and update T as  $T = r * T$ . Return to Step 2.

*Step 8.* If  $k = K$  then stop the algorithm.

##### 4. 2. Data and Parameter Settings

In this application, a kind of medium size problem has been handled with size ( $n=10$ ,  $m=5$ ). The random data has been used in the application. In order not to converge quickly the poor solutions, a relatively high initial temperature  $T_0$  has been taken ( $T_0=100000$ ) in SA algorithm. Cooling rate is also taken high because of keeping the accepting probability of poor results high ( $r=0.80$ ).  $L=1500$ , the iteration limit for temperature change is sufficient to get optimum results for this medium size problem.  $K=35000$ , the global iteration limit is also sufficient to get best results for the problem ( $n=10$ ,  $m=5$ ).

##### 4. 3. Computational Results

The SA algorithm for the tcd-TSP was developed using MatlabR2015b and run on a PC Pentium (R) Dual-Core CPU 3.33 GHz speed with 4 GB of RAM. The proposed SA based algorithm converged to the optimal solution within acceptable time. The coded algorithm was run 10 times for each pair of alpha and beta and 35000 iterations for each run. As seen in Table

1,  $\alpha$  varies in the interval [10,100] and  $\beta$  is kept fixed at 0.01. In Table 2,  $\alpha$  is kept fixed at 90 and  $\beta$  varies in the interval [0.01, 1]. Although the algorithm explores the solution according to the objective function, the optimum selection may be done after all of the algorithmic processes are completed. In the study, optimum traveling path of salesmen has been selected from Table 1 and 2 according to the sum of the primary and secondary tour lengths. Here, the findings indicate that the objective function of model provides the alternative solutions to the tcd-TSP. However, the optimum has been determined among the alternative solutions. The proposed SA based algorithm was found successful to get acceptable results for this problem. Alternatively, many neighborhood structures can be developed and used successfully. Table 1 tells that the tour number nine is optimal and Table 2 shows that again, the same tour is optimal when the total tour length is considered. Besides this information, optimal parameter values have been found in the interval for alpha and beta. The optimal traveling path of salesmen and its length are as follows.

#### The Primary Tour

**3-6-1-2-9-10-7-12-8-5-4-3**

Optimal Length of A: 24136, Alpha for A: 90

#### The Secondary Tour

**12-13-15-14-11-12**

Optimal Length of B: 2182, Beta for B: 0.01

Table 1: Alternative paths found according to alpha [10,100] and beta 0.01.

Path Number	Primary Tour (A)	Secondary Tour (B)	Total Length of Path	Alpha ( $\alpha$ )	Beta ( $\beta$ )	Objective Value
1	24136	3096	27232	10	0.01	241391
2	24136	3517	27653	20	0.01	482755
3	24136	4730	28866	30	0.01	724127
4	24136	4456	28592	40	0.01	965485
5	24136	2822	26958	50	0.01	1206828
6	24176	2182	26358	60	0.01	1450581
7	24136	2822	26958	70	0.01	1689548
8	24220	3517	27737	80	0.01	1937635
9	24136	2182	26318	90	0.01	2172261
10	24136	4456	28592	100	0.01	2413645

Source: Author's calculations using Matlab.

Table 2: Alternative paths found according to alpha 90 and beta [0.01,1].

Path Number	Primary Tour (A)	Secondary Tour (B)	Total Length of Path	Alpha ( $\alpha$ )	Beta ( $\beta$ )	Objective Value
1	24136	2182	26318	90	0.01	2172261
2	24136	3096	27232	90	0.02	2172302
3	24136	3096	27232	90	0.03	2172333
4	24136	3517	27653	90	0.05	2172416
5	24136	2822	26958	90	0.08	2172466
6	24136	2798	26934	90	0.1	2172520
7	24136	4035	28171	90	0.3	2173451
8	24136	3517	27653	90	0.5	2174000
9	24136	2798	26934	90	0.8	2174478
10	24136	3517	27653	90	1	2175757

## 5. Conclusions

In this paper, an integer programming model has been proposed for the tcd-TSP. The paper also introduces the SA based approach for this problem. In order to verify the validity and effectiveness of the proposed model and algorithm, the problem was solved through random data. The findings indicate that many alternative solutions can be obtained by using different

pairs of alpha and beta. As observed in many tours, the length of second tour changes because of the relative size of parameters and the data used in the study. Thus, the results reveal that the cost of path changes as the preferences of traveling salesmen on the path change. Therewithal, the model ensures to fix and update the optimum location of depots.

The proposed model can be applied to various industrial sectors as transportation and tourism are the foremost. It helps the manager to control the travel plan whenever the cost of it changes. Further, the model specifies the optimum location of depots and transfer points. However, the board of management may decide to move the optimum locations while considering the real world constraints. Hence, they apply the sub-optimal results.

As distinct from this study, new mathematical models which take the fixed and variable delivery costs into consideration will be proposed for the tcd-TSP. The new constraints, like time windows, can also be modeled within the problem. In addition to that, new algorithmic approaches will be used to solve more complex structured tcd-TSP. The developing ideas, mathematical models and algorithms upon this problem will be applied to real world problems.

## References

- [1] Bektas, T. (2006). The multiple traveling salesman problem: an overview of formulations and solution procedures. *Omega*, 34, 209-219.
- [2] Brest, J. & Zerovnik, J. (2005). Proceedings from MIC2005: *The 6th Metaheuristics International Conference*. Vienna, Austria.
- [3] Burkard, R. E., Deineko, V. G., van Dal, R. van der Veen, J. A. A. & Woeginger, G. J. (2016). Well-solvable special cases of the traveling salesman problem: a survey. *SIAM Review*, 40(3), 496-546.
- [4] Carter, A. E. & Ragsdale, C. T. (2006). A new approach to solving the multiple traveling salesperson problem using genetic algorithms. *European Journal of Operational Research*, 175, 246-257.
- [5] Cazassa, M., Ceselli, A. & Nunkesser, M. (2012). Efficient algorithms for the double traveling salesman problem with multiple stacks. *Computers & Operations Research*, 39, 1044-1053.
- [6] Chan, Y. & Baker, S.F. (2005). The multiple depot, multiple traveling salesmen facility-location problem: vehicle range, service frequency, and heuristic implementations. *Mathematical and Computer Modeling*, 41, 1035-1053.
- [7] Cheang, B., Gao, X., Lim, A., Qin, H. & Zhu, W. (2012). Multiple pickup and delivery traveling salesman problem with last-in-first-out loading and distance constraints. *European Journal of Operational Research*, 223, 60-75.
- [8] Farahani, R. Z. & Hekmatfar, M. (Eds.). 2009. *Facility location: concepts, models, algorithms and case studies, contributions to management science*, Heidelberg, BW: Physica-Verlag.
- [9] Iori, M. & Riera-Ledesma, J. (2015). Exact algorithms for the double vehicle routing problem with multiple stacks. *Computers & Operations Research*, 63, 83-101.
- [10] Kara, I. & Bektas, T. (2006). Integer linear programming formulations of multiple salesman problems and its variations. *European Journal of Operational Research*, 174, 1449-1458.
- [11] Kirkpatrick, S., Gelatt, C., & Vecchi, M. (1983). Optimization by simulated annealing. *Science*, 220, (4598), 671-680.
- [12] Kota, L. & Jarmai, K. (2015). Mathematical modeling of multiple tour multiple traveling salesman problem using evolutionary programming. *Applied Mathematical Modeling*, 39, 3410-3433.
- [13] Mladenovic, N., Urosevic, D., Hanafi, S. & Ilic, A. (2012). A general variable neighborhood search for the one commodity pickup-and-delivery travelling salesman problem. *European Journal of Operational Research*, 220, 270-285.
- [14] Modares, A., Somhom, S., & Enkawa, T. (1999). A self-organizing neural network approach for multiple traveling salesman and vehicle routing problems. *International Transactions in Operational Research*, 6, 591-606.
- [15] Nagata, Y. & Soler, D. (2012). A new genetic algorithm for the asymmetric traveling salesman problem. *Expert Systems with Applications*, 39, 8947-8953.
- [16] Oncan, T., Altinel, I. K. & Laporte, G. (2009). A comparative analysis of several asymmetric traveling salesman problem formulations. *Computers & Operations Research*, 36, 637 - 654.

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- [17] Osaba, E., Yang, X.-S., Diaz, F., Lopez-Garcia P. & Carbelledo, R. (2016). An improved discrete bat algorithm for symmetric and asymmetric traveling salesman problems. *Engineering Applications of Artificial Intelligence*, 48, 59-71.
- [18] Petersen, H. L. & Madsen, O. B. G. (2009). The double travelling salesman problem with multiple stacks – Formulation and heuristic solution approaches. *European Journal of Operational Research*, 198, 139–147.
- [19] Petersen, H. L., Archetti, C. & Sprenza, M. G. (2010). Exact solutions to the double travelling salesman problem with multiple stacks. *Networks*, 56(4), 229-243.
- [20] Plebe, A., & Anile, A. M. (2002). A neural network based approach to the double traveling salesman problem. *Neural Computation*, 14(2), 437-71.
- [21] Soylu, B. (2015). A general variable neighborhood search heuristic for multiple traveling salesmen problem. *Computers & Industrial Engineering*, 90, 390–401.
- [22] Yuan, S., Skinner, B., Huang, S. & Liu, D. (2013). A new crossover approach for solving the multiple travelling salesmen problem using genetic algorithms. *European Journal of Operational Research*, 228, 72–82.

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## Labour Mobility Within the Eu: Major Effects and Implications for the Main Sending and Receiving Economies

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### Abstract

The paper aims to analyse the effects induced by labour mobility within the European Union, focusing both on emigration and immigration effects for major sending and host economies in terms of the overall economic activity, empowering the business enterprise sector and labour market, as well as on economic (labour force) and non-economic (humanitarian, asylum seekers) migration. Labour mobility within the European Union is an important coordinate of the economic integration process and one of the freedoms granted to the member states, with significant consequences upon their economies. Nevertheless, the international labour migration mainly resides from wage differentials, working conditions or opportunities between sending and host economies, thus proving to be an important symbol of global economic inequality. Taking into consideration all these aspects, our analysis is based on developing various double-log fixed (LSDV) and random (ECM) effects models, using a panel structure that covers five main EU destination countries and ten New EU Member States, respectively a complex set of indicators compiled during 2000-2014 and 2006-2015. The models are processed through OLS and GLS methods of estimation, as well as by using the correlated panels corrected standard errors (PCSE) method, being completed by in-sample and out-of-sample predictions. The results show that immigration flows have important economic consequences leading to significant changes in labour market performances both for natives and foreign population (decreases in employment rates and lowering wage levels). Still, one of the most important positive effects of immigration reflected by the results obtained is represented by an increase in the number of innovative enterprises in the host country, thus confirming the theories linking migration to innovation. In terms of labour emigration, there is evidence to attest that it generates positive effects on the main sending economies from Central and Eastern Europe on the GDP per capita, earnings and exports, especially through remittances, but the overall negative impact is predominant.

**Keywords:** international migration, economic integration, innovation, employment, economic growth

**JEL Classification:** F22, F63

### 1 Introduction

Europe is facing nowadays one of the major challenges induced by international migration, a major frontier of globalization. Labour mobility within the EU is an important coordinate of the economic integration process and one of the four freedoms granted to the member states, with significant consequences (both positive and negative) upon their economies. Thus, the EU tends to be divided into two main areas in terms of migration (economic and humanitarian), respectively the New Member States (EU-13, since 2004, 2007 and 2013), as migrant sending countries, and the Old Member States (EU-15), most of them being migrant receiving countries or host economies (especially Germany in absolute terms, Austria and Sweden relative to their population, along with Italy and Spain even though with a slight decrease compared to previous years, but still among the top destinations especially for the emigrants coming from Central and Eastern Europe).

Thus, most countries from Central and Eastern Europe are labour exporting economies, Romania and Poland having a large stock of emigrants, respectively a major part of their labour force (especially highly skilled labour) is working outside

their borders, thus inducing significant economic consequences. At the same time, Bulgaria, Slovak Republic and Lithuania have registered in 2015 large emigrant stocks. Still, on the other hand, if we analyse the entries of money sent by the emigrants back to their families in the source country, we can observe that Hungary, Czech Republic, Lithuania and Romania have also registered large levels of remittances.

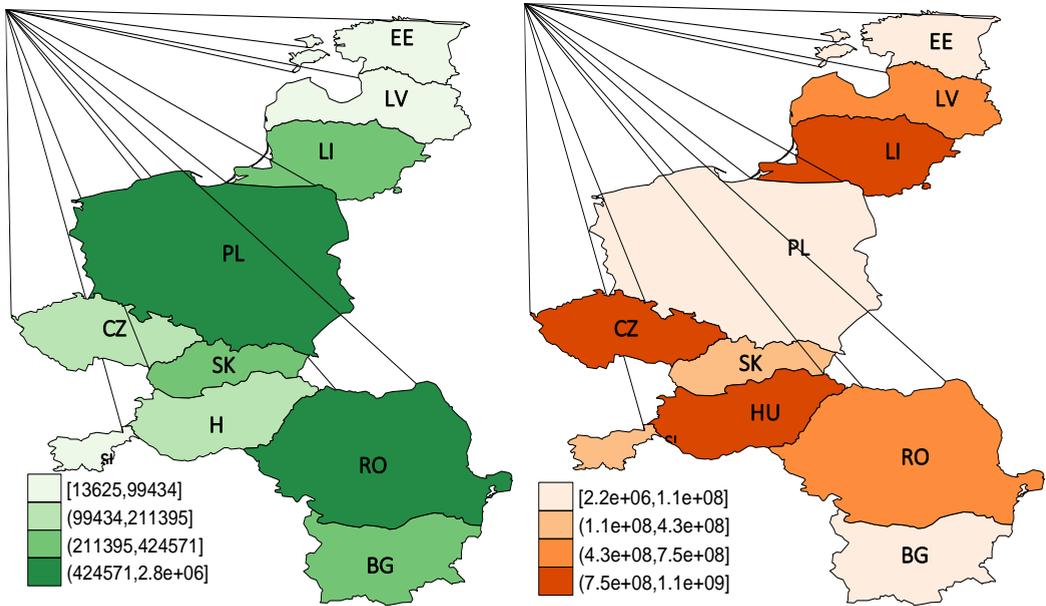


Figure 1: Stock of emigrants (left) and remittances (right) for the main sending countries from Central and Eastern Europe, 2015

Source: own process based on Brucker et al. (2009) and World Bank data through Stata 13

Thus, even though the stock of emigrants is extremely high in the case of Poland or Bulgaria, remittances are at a much lower level compared to other neighbouring migrant sending countries.

Therefore, not all of the migrant origin countries from Central and Eastern Europe are necessarily characterized by an equivalent, proportional, level of remittances with respect to the number of registered emigrants. Still, Romania tends to differentiate itself from this point of view, in 2015 registering both high levels of emigrants and associated high remittances.

At the same time, Romania and Bulgaria are confronting with very low per capita incomes, labour market imbalances (high unemployment rates and low employment growth rates), along with a high at-risk-of-poverty rate, remittances thus representing an important source of external financing with positive effects upon their economies and especially for the families back home in terms of income, consumption, savings and investment.

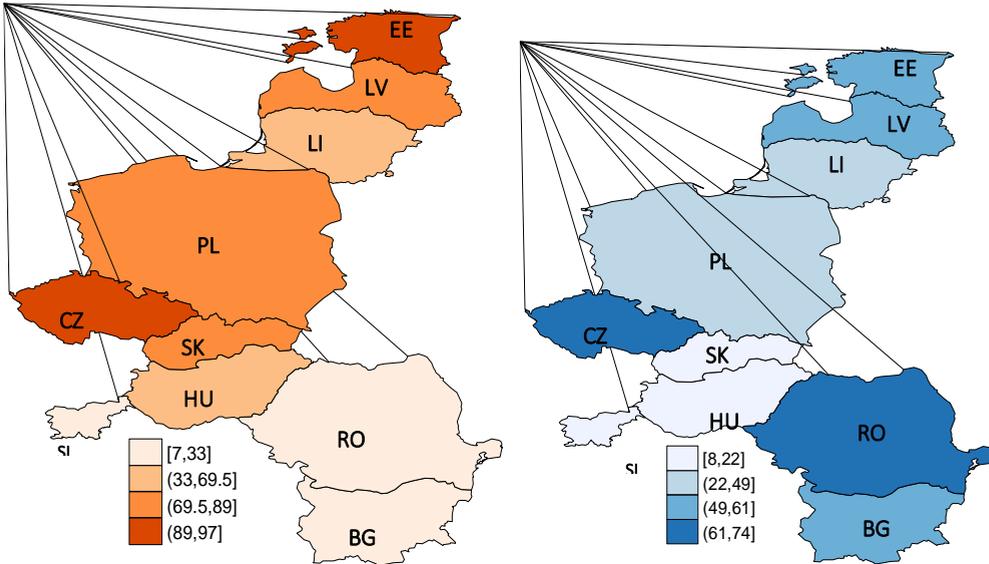
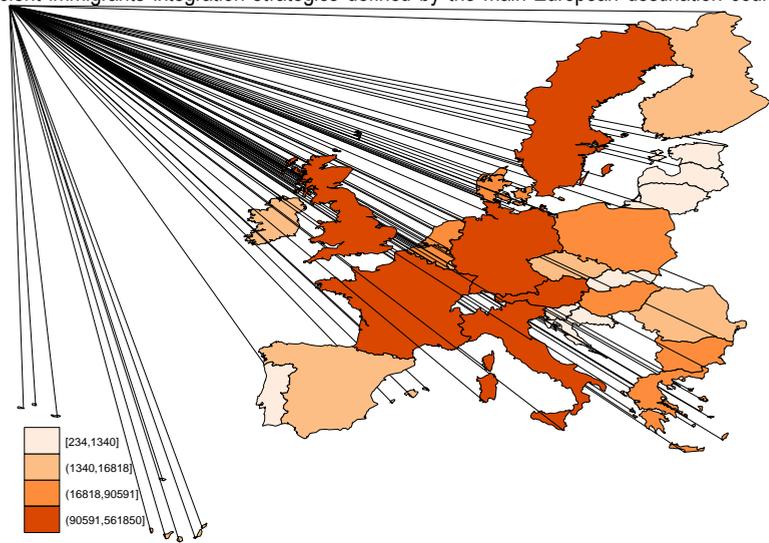


Figure 2: Per capita income (left) and at-risk-of-poverty rate (right) for the main sending countries from Central and Eastern Europe, 2015. Source: own process based on World Bank data through Stata 13

Moreover, according to Noja and Son (2016) the anxiety towards emigrants from Central and Eastern Europe in the context of the latest enlargements, mainly 2007 (Romania and Bulgaria) and 2013 (Croatia), but as well towards asylum seekers and refugees coming from Syria and other Arab countries, highlights the importance of international migration policies, along with accurate and efficient immigrants integration strategies defined by the main European destination countries



(Germany, Austria, Sweden).

Figure 3: Total refugees and asylum seekers by country or territory of asylum within the EU, mid-2015. Source: own process based on UNHCR data through Stata 13

As in the case of previous refugee crises in the early 1990, the migration impact is cumulated in a few countries. Thus, across OECD, Turkey is the most affected, hosting at present approximately 1.9 million Syrians, mostly with a temporarily protective status, as well as a significant number of persons coming from Iraq. Moreover, other 300000 persons, mainly

from Afghanistan, Iraq and Pakistan have an illegal residence in Turkey, waiting to transit towards the European Union to seek asylum. At the same time, more than 1.1 million Syrians find themselves in Lebanon, where the situation is increasingly uncertain, while a large number of refugees are in Jordan (about 630000) and Egypt (130000).

The large variety of migration corridors, migrant sending countries and migration motives shape this refugee crisis into one extremely difficult to approach and coordinate. Moreover, not only the fact that migrants came from various countries and territories of origin, but at the same time the main destination and asylum countries vary significantly across the EU. Thus, according to the OECD (2015) in Germany, during the first six months of 2015, Kosovo and Syria have each accounted 20% of the total asylum seekers, followed by Albania (15%). In Sweden, Syrians have represented 27% of total migrants, followed by Eritreans and Afghanis with few over 10%, while in Italy, Gambia was the first migrant sending country, followed by Senegal and Nigeria.

## 2 Literature Review on International Migration and Labour Market Interdependencies

The economic literature provides various theories and perspectives trying to explain international migration, both in terms of the migration decision and shaping factors of the migratory flows, and with respect to the economic consequences for migrant sending and receiving economies. Some of the most important approaches are the classical and neoclassical migration theories (mainly promoted by Lewis, 1954; Harris and Todaro, 1970; Massey *et al.*, 1993). The classical migration approach explains the fact that migration and capital movements are performed with a certain intensity due to wage differentials between two capitalist economies, one characterised through labour surplus and the other by capital surplus. On the other hand, in the neoclassical perspective migration represents a complex phenomenon which induces unbalances, the migratory flows seizing when the equilibrium is reached (Harris and Todaro, 1970, p. 129).

Goss and Lindquist (1995) suggest that international labour migration generates a competition between migrants, which will thus lead to a decrease in wage levels for capital plentiful regions. At the same time, remittances towards the origin country can alleviate inequalities and wage differences that induce international labour mobility.

Moreover, the theory of migrant networks highlights the fact that international migration tends to increase as result of the interpersonal connections established between migrants that link origin and destination countries, due to relatively lower costs and associated risks. As a representative of this theory, Taylor (1986) reveals one of the most important incentives for international migration within host economies, respectively the presence of interpersonal migrant networks.

As considering the both sides on international migration and the main research questions regarding the emigration impact on sending countries and immigration effects on native workers and host economies, there are various theories trying to solve these questions.

Krause *et al.* (2016) considered the labour market integration of migrants, focusing on the Single European Labour Market, its performances, risks and opportunities, as well as the importance and usefulness of European labour mobility. Thus, they performed an online study among labour market experts in Europe and concluded that most experts confirm the importance of a Single European Labour Market for improving the economic conditions, thus leading to welfare. Still, they seem to be uncertain about achieving these benefits. Moreover, in the case of EU labour mobility, the experts questioned by Krause *et al.* (2016) consider that the recognition of professional diplomas and qualifications, an optimization of the social security systems and over-passing the language barriers are some of the most important drivers to enhance labour mobility.

Bosetti *et al.* (2015) have analysed the interdependencies between highly skilled labour migration and innovation for a panel of 20 European economies during 1995-2008. Their empirical results suggest that a higher percentage of tertiary educated migrants integrated into the host economies labour markets and holding a job that requires higher qualifications and studies is also associated with a higher degree of knowledge creation. Thus, the brain drain-brain gain theory tends to be also confirmed by the Bosetti *et al.* (2015) which conclude that highly skilled migration leads to knowledge creation and innovation (measured through the number of patent applications), as well as to an increase in the general public scientific research (measured by the number of citations in published articles). Within this perspective, Bosetti *et al.* (2015) mention that the overall political efforts performed under the framework of Europe 2020 strategy will contribute to enhancing EU's competitiveness in innovation.

At the same time, Ozgen (2015) assessed the labour immigration effects on the firm innovation process within Western Europe, focusing on the main influential channels. The author mentions that in most of the European countries the migrants

have significantly diversified in terms of origin country, gender or educational level, all of these aspects generating major economic consequences on the innovation performance of firms, as well as on intra-firm diversity.

Moreover, in terms of the general welfare impact of international migration in EU countries, Aubry *et al.* (2016) have quantified the effects induced by international migration upon the living standards of natives. The authors have developed a model which takes into account the interactions between the labour market, fiscal and market size effects (such as changes in the variety of goods available for consumers) induced by migration, along with trade relations between countries. Their results highlight that recent migration flows have generated positive effects on 69% of the native population in 34 OECD member states, respectively for 83% of the natives from the 22 richest OECD economies.

The emigration approach focuses more on migration effects on labour market outcomes, unemployment and economic growth generated through remittances and household impacts on those left behind.

The large economic literature on the impact of labour emigration on migrant sending economies highlights that it significantly depends on the way the capital-labour ratio is affected related to the persons remaining in the origin country. Moreover, the emigration effects are extremely different from one socio-economic group to another. Thus, overall, emigration tends to have a positive impact on those remaining, by increasing the economic welfare and reducing income inequalities in migrant sending countries (Clemens, 2011; de Haas, 2010; Taylor *et al.*, 1996).

In Europe, Fertig and Kahanec (2015) have analysed the potential migration flows in the context of EU constant enlargement. Their results suggest that migration flows are largely shaped by policy variables and to a smaller extent by those economic and demographic. Thus, within the perspective of adopted and implemented migration policies, granting labour market free access to migrants by the hosting countries (Germany, Italy and Austria, in absolute terms and relative to their population) significantly increases the migration waves, especially on the short run.

### 3 Methodology and Data: Developed Models, Equations, Limits and Testing

#### 3.1 General form of developed models

Our models follow the specific linear representation of the regression models with panel data, described by Baum (2001, p. 219) in order to properly analyse the emigration and immigration effects upon sending and receiving economies, configuration that was also used in previous researches (Son and Noja, 2012):

$$y_{it} = \sum_{k=1}^k x_{kit} \beta_{kit} + \varepsilon_{it}$$

$$i = 1, \dots, N \quad (1)$$

$$t = 1, \dots, T$$

where:  $N$  is the number of panel units (countries), while  $T$  represents the number of periods (time).

The *fixed effects model* or the *Least Squares Dummy Variable (LSDV) model* has the following representation (Baum, 2001, p. 220):

$$y_{it} = x_{it} \beta_k + z_i \delta + u_i + \varepsilon_{it} \quad (2)$$

where  $x_{it}$  is a  $1 \times k$  vector of variables varying between countries and in time,  $\beta$  represents a  $1 \times k$  vector of  $x$  coefficients,  $z_i$  is a  $1 \times p$  vector of the variables that are constant in time, but vary between countries (as elements of the panel),  $\delta$  represents a  $p \times 1$  vector of  $z$  coefficients,  $u_i$  is the individual effects, for every element of the panel, and  $\varepsilon_{it}$  is the disturbance term.

The *random effects model* or the *Error Component Model (ECM)* has the following representation (Baum, 2001, p. 227):

$$y_{it} = x_{it}\beta + z_i\delta + (u_i + \varepsilon_{it}) \quad (3)$$

where:  $u_i + \varepsilon_{it}$  represents the compounded disturbance term, and  $u_i$  reflects the individual effects.

The models developed in order to assess the immigration effects upon native workers and host country's labour market, including humanitarian migration, as well to evaluate the emigration impacts on sending economies, follow the specification of double-log simple and multiple regression models with panel data. These models were processed through OLS (Ordinary Least Squares) and GLS (Generalized Least Squares) methods of estimation in the case of fixed and random effects, respectively through the correlated panel corrected standard errors method (PCSE) method.

### 3.2 Variables and indicators used for the empirical analysis

In the analysis we focused on the international migration effects upon the general economic activity (economic growth, business enterprise sector, innovation) and labour market fundamentals (employment, employees with temporary contracts, earnings), respectively on the educational background (participation rate in education, upper-secondary and tertiary education) within the context of the globalization process and increased interdependencies between the economies globally.

We thus selected a large scale of indicators as proxy for the variables of developed models, ranging from the economic activity, labour market outcomes and education to various sides of the international migration process (immigration vs. emigration, labour vs. humanitarian migration), thus comprising:

*i) international migration specific indicators:* immigration flows and stocks, flows of refugees and asylum seekers, the stock of emigrants, remittances (mil. USD);

*ii) economic activity and labour market indicators:* total (mil. Euro) and per capita (Euro) GDP and the GDP per person employed (USD); employment and unemployment rates (%) –total, foreign population; part-time employment rate and temporary contracts; earnings by two-earner married couple with two children (Euro) and earnings dispersion among employees (Decile 9/ Decile 5), average annual wages (USD); the educational attainment (both general and vocational) through secondary and tertiary education levels (the highest ISCED - International Standard Classification of Education level successfully completed) and the participation rate in education covering participation in formal and non-formal education and training; at-risk-of-poverty rate; business enterprise statistics – number of enterprises, number of innovative enterprises, total business expenditures on research and development.

*iii) the globalization process:* KOF Index of Economic Globalization and the value added by foreign controlled enterprises as a share of total value added (foreign affiliate statistics); international trade (exports and openness degree) and international investment (inflows and outflows of foreign direct investment).

The panel structure covers five main EU destination countries (Germany, Austria, Sweden, Italy and Spain) and ten New EU Member States from Central and Eastern Europe (Bulgaria, Romania, Hungary, Slovak Republic, Slovenia, Czech Republic, Poland, Lithuania, Latvia, Estonia). Within the performed analysis we covered the 2000-2014 period of time for the immigration analysis and the 2006-2015 period for the emigration analysis due to differences in data availability and used as main data sources the statistical database of the European Commission - Eurostat, the international migration database of OECD, World Bank – World Development Indicators and United Nations Database – UNHCR, ETH Swiss Federal Institute of Technology Zurich, UNU WIDER World Income Inequality Database.

## 4 Results and Discussions

The empirical analysis of labour mobility in Europe has a double objective: *(i) first*, to assess the emigration process for considered sending countries from Central and Eastern Europe through identifying the main modellers of emigrant stocks (migration incentives/ decisions), as well as in terms of the economic consequences induced by emigration (through the

loss of a significant part of the origin country's labour force and remittances); (ii) *second*, to evaluate the immigration effects (both economic and humanitarian) within the main EU destination countries and upon their natives in terms of wages, labour market performance and integration of immigrants, business sector development and innovation, openness degree.

Therefore, in the first stage of our empirical research we developed a set of five macroeconomic models, processed through random-ECM (model 1) and fixed-LSDV (model 2) effects (the Hausman test validated the results of the random effects models with a  $\chi^2(6)=1.43$  and  $\text{Prob}>\chi^2=0.9641$ ), two-stage (model 3) and three-stage (model 4) least squares regressions and correlated panels corrected standard errors (PCSE – model 5).

**Table 1 Results of the models developed and processed for the analysis of emigration shaping factors**

	(1)	(2)	(3)	(4)	(5)
	log_Emigrants	log_Emigrants	log_Emigrants	log_Emigrants	log_Emigrants
log_GDP_cap	0.0353 (0.0202)	0.0340 (0.0204)	-0.0345 (0.112)	-0.0345 (0.108)	-0.0345 (0.0904)
log_Temp_contr	-0.0810 (0.0469)	-0.0738 (0.0476)	-0.651*** (0.137)	-0.651*** (0.132)	-0.651*** (0.107)
log_Open_degre	0.714*** (0.0973)	0.700*** (0.101)	0.980*** (0.134)	0.980*** (0.130)	0.980*** (0.0633)
log_FDI_inward	0.343 (0.189)	0.373 (0.194)	0.317 (0.302)	0.317 (0.291)	0.317* (0.138)
log_Earnings	0.0958* (0.0372)	0.0979* (0.0376)	0.145 (0.134)	0.145 (0.129)	0.145 (0.123)
log_Poverty	-0.0778** (0.0300)	-0.0789* (0.0301)	0.355** (0.115)	0.355** (0.111)	0.355*** (0.0984)
_cons	3.322*** (0.954)	3.327*** (0.880)	1.142 (1.702)	1.142 (1.642)	1.142 (0.801)
N	100	100	100	100	100
R <sup>2</sup>	0.3074	0.652	0.542	0.542	0.542

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: own process of panel data through Stata 13 econometric package

We selected several independent variables according to the relevant literature and constrained by low data availability which try to better capture the emigration incentives. Thus, the results obtained confirm the main migration decision theories, highlighting that the migrants primarily search for higher living standards abroad and better working conditions. Basically, according to our results an increase in poverty rates in the origin country induces higher emigrant stocks (a 3.55% increase confirmed by three of the five methods of estimation used).

Moreover, the labour market fundamentals and flexibility measures used to increase employment reflected here through an increase in the number of persons employed on a temporary contracts basis represent a disincentive to migrate, thus reducing the size of the emigration stocks (by 0.651% also confirmed by three of the five methods of estimation used). Another important factor that can contribute to increased labour mobility in the present context of globalisation is the openness degree. Thus, higher openness degrees of migrant sending economies (in terms of exports and imports as percentage of the GDP) lead to an increase in the stock of emigrants for panel comprised economies.

Taking into consideration these aspects, we expanded our emigration analysis by considering its effects and thus developing a different set of eight simple regression models (one having as explanatory variable the stock of emigrants and the other remittances) processed through the correlated panels corrected standard errors (PCSE) method of estimation.

**Table 2 Results of the models developed for the assessment of emigration impacts on sending economies**

	(1)	(2)	(3)	(4)
	log_GDP_cap	log_Export	log_FDI_out	log_Earnings
log_Emigrants	0.195*** (0.0260)	0.368*** (0.00671)	-0.419*** (0.0279)	0.0724 (0.0421)
_cons	1.023** (0.315)	6.079*** (0.110)	6.870*** (0.286)	2.755*** (0.516)
N	100	100	100	100
R <sup>2</sup>	0.073	0.336	0.317	0.012
	(5)	(6)	(7)	(8)
	log_Empl_rate	log_Temp_empl	log_Poverty	log_Edu_part
log_Emigrants	-0.274*** (0.0608)	-0.207*** (0.0290)	0.119*** (0.0216)	-0.00118 (0.0707)
_cons	6.729*** (0.701)	5.913*** (0.348)	1.956*** (0.282)	3.484*** (0.919)
N	100	100	100	100
R <sup>2</sup>	0.190	0.111	0.033	0.000
	(1)	(2)	(3)	(4)
	log_GDP_cap	log_Export	log_FDI_out	log_Earnings
log_Remittances	0.290*** (0.0730)	0.241*** (0.0533)	0.0326 (0.0336)	0.131*** (0.0340)
_cons	-2.310 (1.418)	5.815*** (1.050)	1.146 (0.656)	1.056 (0.694)
N	100	100	100	100
R <sup>2</sup>	0.150	0.134	0.002	0.037
	(5)	(6)	(7)	(8)
	log_Empl_rate	log_Temp_empl	log_Poverty	log_Edu_part
log_Remittances	-0.0620 (0.0550)	-0.00270 (0.0387)	0.0254 (0.0471)	-0.168*** (0.0463)
_cons	4.628*** (1.058)	3.459*** (0.745)	2.901** (0.948)	6.772*** (0.890)
N	100	100	100	100
R <sup>2</sup>	0.009	0.000	0.001	0.055

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: own process of panel data through Stata 13 econometric package

The results highlight positive effects of emigration for migrant sending economies from Central and Eastern Europe only in terms of the overall economic activity (increases in the GDP per capita, level of household earnings through remittances, international trade operations).

There are significant negative effects on labour market outcomes (decreases in employment rates - both total and temporary employment), especially through the loss of a significant part of the labour force (mostly highly skilled labour), as well as on the educational background reflected by a reduction of the participation rate in education and training.

Moreover, the results highlight that emigration tends to deepen the poverty levels by increasing the at-risk-of-poverty rates for considered economies.

From the immigration perspective, our main focus was on the major challenges faced by Europe nowadays, where large migrant flows have emerged in the context of European integration, and moreover recently due to increased waves of refugees and asylum seekers targeting Germany, Austria, Sweden or Turkey as main destination countries, through Eastern and Central Mediterranean or Western Balkans routes.

We thus developed two sets of twelve simple regression models processed through the correlated panels corrected standard errors method of estimation (in the first set we used as explanatory variable the stocks of immigrants and in the second set we used as independent variable the inflows of asylum seekers).

**Table 3 Results of the models developed for the extended analysis of immigration economic consequences within main receiving countries**

	(1)	(2)	(3)	(4)
	log_GDP_cap	log_GDP_empl	log_Unempl_rate	log_Unempl_rate_forei gn
log_lmig_stock	-0.0862*** (0.0164)	-0.0662*** (0.00464)	0.108*** (0.0197)	0.168*** (0.0257)
_cons	10.88*** (0.133)	11.20*** (0.0419)	1.106*** (0.154)	1.357*** (0.195)
N	70	75	75	75
R <sup>2</sup>	0.172	0.533	0.182	0.142
	(5)	(6)	(7)	(8)
	log_Empl_rate	log_Empl_foreign	log_Wages	log_Earn_disp
log_lmig_stock	-0.0436*** (0.00675)	-0.0249*** (0.00683)	-0.0746*** (0.00958)	0.0288*** (0.00367)
_cons	4.512*** (0.0494)	4.284*** (0.0514)	11.26*** (0.0789)	0.362*** (0.0263)
N	75	75	75	75
R <sup>2</sup>	0.180	0.031	0.254	0.065
	(9)	(10)	(11)	(12)
	log_Edu_sec	log_Edu_tert	log_BERD	log_Innov_entrep
log_lmig_stock	-0.0945*** (0.0202)	0.00970 (0.0167)	-0.330*** (0.0536)	0.863*** (1.82e-08)
_cons	4.475*** (0.152)	2.901*** (0.130)	8.378*** (0.437)	3.398*** (0.000000143)
N	75	75	70	5
R <sup>2</sup>	0.073	0.001	0.166	0.777

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: own process of panel data through Stata 13 econometric package

Our results suggest that there is evidence to confirm some of the major concerns regarding the negative impact of immigration on host economies. Thus, an increase in both stocks and inflows of immigrants within the five analysed countries leads to a reduction in GDP per capita and per person employed levels, reduces the labour market performances both for natives and other immigrants already established there (reflected to an increase in total and foreign unemployment rates and associated decreases in total and foreign employment rates), a decrease of wages and increased earnings dispersion. Still, one of the most important positive effects of immigration reflected by the results obtained is represented

by an increase in the number of innovative enterprises in the host country, thus confirming the theories linking migration to innovation.

**Table 4 Results of the models developed for the analysis of asylum seekers**

**economic consequences within receiving countries**

	(1)	(2)	(3)	(4)
	log_GDP_cap	log_GDP_empl	log_Unempl_rate	log_Unempl_rate_forei gn
log_asylum_infl	0.128*** (0.0209)	0.0251*** (0.00696)	-0.0201 (0.0238)	-0.0646 (0.0805)
_cons	8.962*** (0.213)	10.45*** (0.0671)	2.132*** (0.242)	3.280*** (0.806)
N	70	75	75	75
R <sup>2</sup>	0.280	0.062	0.005	0.017
	(5)	(6)	(7)	(8)
	log_Empl_rate	log_Empl_foreign	log_Wages	log_Earn_disp
log_asylum_infl	0.0604*** (0.00796)	-0.0505 (0.0309)	0.0996*** (0.0121)	-0.0780*** (0.00997)
_cons	3.581*** (0.0809)	4.594*** (0.300)	9.701*** (0.120)	1.353*** (0.0961)
N	75	75	75	75
R <sup>2</sup>	0.281	0.104	0.371	0.389
	(9)	(10)	(11)	(12)
	log_Edu_sec	log_Edu_tert	log_BERD	log_Innov_entrep
log_asylum_infl	0.292*** (0.0328)	-0.0129 (0.0202)	0.546*** (0.0501)	0.143 (.)
_cons	0.867** (0.321)	3.103*** (0.205)	0.461 (0.478)	8.777 (.)
N	75	75	70	5
R <sup>2</sup>	0.565	0.001	0.390	0.028

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Source: own process of panel data through Stata 13 econometric package

On the other hand, if we consider only the asylum seekers inflows into the main EU host economies analysed within the panel, the results tend to be contradictory and show positive effects of immigration (a possible explanation being the relatively small number of asylum seekers compared to labour immigrants during the analysed period, even though there are significant increases in the latest years).

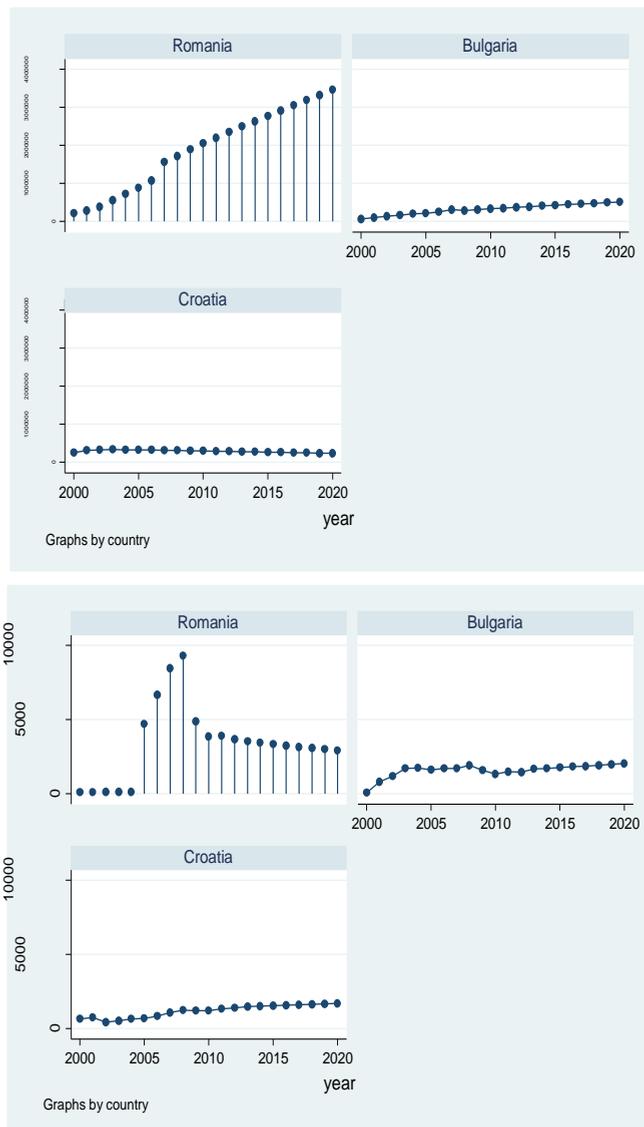
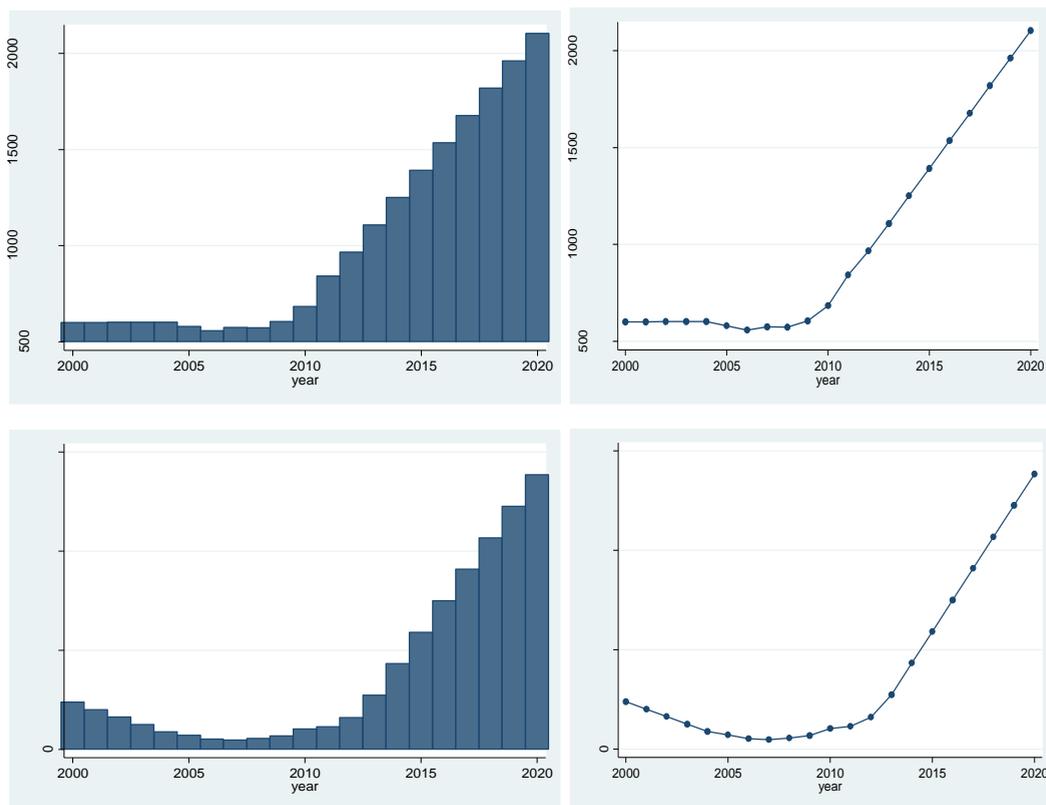


Figure 4: Estimated emigrants (stock) for the New EU Member States since 2007 (Romania and Bulgaria) and 2013 (Croatia), during 2000-2020. Source: own process based on panel data through Stata 13

We completed the empirical analysis with in-sample and out-of-sample predictions until 2020 of the emigrants stock and remittances for three of the New EU Member States as sending economies considered in the panel – Romania, Bulgaria and Croatia and of the immigrants and asylum seekers inflows into one of the main destination country – Germany.



**Figure 5: Estimated flows of immigrants and asylum seekers in the case of Germany during 2000-2020**

Source: own process based on panel data through Stata 13

We could thus observe that the stock of emigrants will continue to follow an increasing trend in the case of Romania, but the volume of remittances will decrease significantly, while Bulgaria and Croatia will register an approximately constant evolution, with a slight increase in remittances. At the same time, the inflows of immigrants and asylum seekers into Germany will continue to register an upward tendency, with major increases by the end of 2020 compared to previous years.

**5 Concluding Remarks**

Labour mobility in Europe is facing a major challenge nowadays in framework of the socio-economic and geopolitical context induced by the globalization process through increased interdependencies between economies globally.

Our empirical analysis was focused on developing various models which try to better capture the effects induced by increased migration flows (economic and humanitarian) from the broader perspective of emigration and immigration, thus trying to answer to some of the major questions and related concerns.

The results show that immigration flows have important economic consequences leading to significant changes in labour market performances both for natives and foreign population (decreases in employment rates and wage levels, higher earnings dispersion), which largely vary from one country to another, so on the short-run, the negative effects of immigration are extremely significant. Still, one of the most important positive effects of immigration reflected by the results obtained is

represented by an increase in the number of innovative enterprises in the host country, thus confirming the theories linking migration to innovation.

Thus, migrant host economies need to consider several specific labour market policies in order to cope with large inflows of immigrants and refugees. Active labour market policies (ALMPs) focus on unemployed persons, their implementation providing assistance in finding a job, training for professional development and skills acquirement, wage incentives and direct job creation in the public sector, all of these being extremely necessary for the inclusion of immigrants. The flexicurity policies combine the two perspectives on flexibility and security as main components of European employment strategies. Within this perspective, the overall focus should be on new employment guidelines and job creation for a better coordination of the compatibility between labour demand and supply, together with an improvement in the educational level of the labour force, better working conditions and wage increases for all the EU Member States (both labour exporting and receiving ones).

From the emigration perspective, the findings show positive effects of labour emigration on sending countries, on short-terms, by upgrading the living standards for those remaining (reflected to an increase in earnings level and GDP per capita), mainly through remittances. Still, there is a significant negative impact induced by the loss of a large part of the labour force through emigration (especially highly skilled labour) for the considered economies from Central and Eastern Europe, reflected by the results obtained through decreases in employment rates - both total and temporary employment, as well as on the educational background reflected by a reduction of the participation rate in education and training. Moreover, the results highlight that emigration tends to deepen the poverty levels by increasing the at-risk-of-poverty rates for considered economies.

Overall, the performed analysis confirms some of the main economic consequences of international migration in a global era advanced by the literature regarding the fact that labour mobility, induces both negative and positive effects for migrant sending and receiving economies, which largely vary from one country to another, according to the measures and policies adopted to better cope with this complex phenomenon.

## References

- [1] Aubry Amandine, Burzynski Michal, Docquier Frederic (2016), „The welfare impact of global migration in OECD countries”, *Journal of International Economics*, issue 101, pp. 1-21.
- [2] Baum F. Christopher (2001), “An Introduction to Modern Econometrics Using Stata”, *Stata Press*, ISBN 1-59718-013-0, pp. 1-341.
- [3] Bosetti Valentina, Cattaneo Cristina, Verdolini Elena (2015), „Migration of skilled workers and innovation: A European Perspective”, *Journal of International Economics*, issue 96, pp. 311-322.
- [4] Brücker Herbert, Baas Timo, Beleva Iskra, Bertoli Simone, Boeri Tito, Damelang Andreas, Duval Laetitia, Hauptmann Andreas, Fihel Agnieszka, Huber Peter, Iara Anna, Ivlevs Artjoms, Jahn Elke, Kaczmarczyk Pawel, Landesmann Michael, Mackiewicz-Lyziak Joanna, Makovec Mattia, Monti Paola, Nowotny Klaus, Okolski Marek, Richter Sandor, Upward Richard, Vidovic Hermine, Wolf Katja, Wolfeil Nina, Wright Peter, Zaiga Krisjane, Zylicz Anna (2009), *Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements*, European Integration Consortium Final Report, Employment, Social Affairs and Equal Opportunities Directorate General of the European Commission (contract VC/2007/0293), Nuremberg 2009.
- [5] Clemens Michael (2011), „Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?”, *Journal of Economic Perspectives*, Vol. 25, No. 3, pp. 83–106.
- [6] Dustmann Christian, Frattini Tommaso, Glitz Albrecht (2008), “The Labour Market Impact of Immigration”, *CReAM Discussion Paper no. 11*, Centre for Research and Analysis of Migration, Department of Economics, University College London, pp. 1-27.
- [7] Fassio Claudio, Kalantaryan Sona, Venturini Alessandra (2015), „Human Resources and Innovation: Total Factor Productivity and Foreign Human Capital”, Institute for the Study of Labor, Discussion Paper No. 9422, pp. 1-35.
- [8] Fertig Michael, Kahanec Martin (2015), “Projections of potential flows to the enlarging EU from Ukraine, Croatia and other Eastern neighbours”, *IZA Journal of Migration*, no. 4, issue 6, pp. 1-27.

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- [9] Goss Jon, Lindquist Bruce (1995), „Conceptualizing International Labor Migration: A Structuration Perspective”, *International Migration Review*, Vol. 29, No. 2, pp. 317-351.
- [10] Harris R. John, Todaro P. Michael (1970), „Migration, Unemployment and Development: a Two-Sector Analysis”, *The American Economic Review*, volume 60, issue 1, pp. 126-142.
- [11] Hein de Haas (2010), „Migration and Development: A Theoretical Perspective”, *International Migration Review*, Vol. 44, No. 1, pp. 227-264.
- [12] Krause Annabelle, Rinne Ulf, Zimmermann Klaus (2016), “European Labour Market Integration: What the Experts Think”, forthcoming *International Journal of Manpower* 2016, IZA Discussion Paper no. 8383, pp. 1-27.
- [13] Kerr William (2014), „U.S. High-Skilled Immigration, Innovation and Entrepreneurship: Empirical Approaches and Evidence”, WIPO Economics & Statistics Series, Economic Research Working Paper No. 16, pp. 1-26.
- [14] Kwok Viem, Leland Hayne (1982), „An Economic Model of Brain Drain”, *American Economic Review*, Vol. 72, No. 1 (March 1982), pp. 91-100.
- [15] Massey S. Douglas, Arango Joaquin, Hugo Graeme, Kouaouci Ali, Pellegrino Adela, Taylor Edward (1993), „Theories of International Migration: A Review and Appraisal”, *Population and Development Review*, vol. 19, issue 3, pp. 431-466.
- [16] Noja Gratiela Georgiana, Son Liana, Caran Margareta (2015), “Key Challenges of Emigration from Central and Eastern European Economies: Empirical Evidence”, *The Macrotheme Review*, no. 4, issue 6, pp. 97-110.
- [17] Ozgen Ceren (2015), „Immigration and Firm Innovation in Western-Europe: Understanding the Channels of Influence”, *Migration Policy Centre, EUI*, ISBN 978-92-9084-235-4, pp. 1-12.
- [18] OECD (2015), “Is this humanitarian migration crisis different?”, *Migration Policy Debates*, no. 7, September 2015.
- [19] OECD (2014), *International Migration Outlook*, Mobilising Migrants' Skills for Economic Success.
- [20] Son Liana, Noja Gratiela Georgiana (2012), „A macroeconometric panel data analysis of the shaping factors of labour emigration within the European Union”, *Theoretical and Applied Economics*, Vol. XIX, No. 11(576), pp. 15-30.
- [21] Taylor J. Edward (1986), „Differential Migration, Networks, Information and Risk”, pp. 147-171 in Oded Stark (ed.), *Research in Human Capital and Development, Vol. 4, Migration, Human Capital, and Development*, Greenwich, JAI Press.
- [22] Taylor J. Edward, Arango Joaquin, Hugo Graeme, Kouaouci Ali, Massey S. Douglas, Pellegrino Adela (1996), „International Migration and Community Development”, *Population Index*, Vol. 62, No. 3, pp. 397-418.
- [23] Zimmermann F. Klaus (2005), *European Migration: What Do We Know?*, Oxford University Press, New York, ISBN 978-0-19-925735-5, pp. 1-653.

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## The Analysis of the Labor Market in Albania

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### Abstract

Albania's economic growth after 1990 was among the highest of all the economies in transition. Economic activity, as measured at the fair value of the gross domestic product (GDP) for the period 1996-2015 grew at an average annual rate of 5.6 percent, despite the shock of 1997 because of the collapse of the pyramid schemes and the contraction in GDP growth in 2004-2015 due to the impact of the economic and financial crisis. Such high levels of economic growth, has been preceded by economic and structural reforms and the expansion of services and construction, spurred by remittances and informal activities.

**Keywords:** budgetary policies, remittances, employment, dual labor markets, informal employment, informality

## 1. INTRODUCTION

### 1.1 Overview of the economic and social context

Economic growth was not associated with increased employment opportunities, throughout this period, the level of employment growth remained slow - with significant negative definite peaks in 2009 and 2015. The unemployment rate reached 18.4 percent in year 1999 and its indicator remained in double digits throughout the period 2009-2015. In 2015, it was estimated at 13.2 percent of the workforce

Economic growth was not associated with increased job opportunities, throughout this period, the growth of employment level has remained slow - with considerable negative defined peaks in 2009 and 2015. The unemployment rate reached 18.4 percent in 1999, and its indicator has remained in double digits throughout the period 2009-2014. In 2015, it was estimated at 13.2 percent of the workforce. In 2015, remittances reached 9.2 percent of GDP (\$ 1.5 million), and decreased by 16% compared to a year ago. The volume of exports grew by 5.9 percent in 2010 to 25.5 percent in 2007, declined slightly in 2008 (15.6 percent). The volume of imports followed a similar trend, increasing from 9 percent in 2010 to 27.1 percent in 2014, fell to 14.8 per cent in value in 2008. The present value of the deficit increased by 10.5 percent of GDP in 2014 to 14.5 percent in 2015, reflecting a worsening of the trade deficit and the decline in remittances. Similarly, the trade deficit has risen from 26.5 percent of GDP in 2014 to 27.2 percent in 2015. In 2015, net inflows of capital covered the current account deficit and contributed to the growth of reserves aliens . "The net foreign investment direct investment (FDI) increased by 42 percent, reaching the level of 7 percent of GDP, from 5.9 percent in 2014, with an increasing investment in agriculture. Inflation has fallen from its peak of 42.1 percent in 1997 to 2.5 percent in 2006. The slight increase in inflation acceleration in 2014 and 2015 (3.1 and 3.5 respectively percent), mainly due to food price growth products. However, inflation has remained within the limits set by the Bank of Albania (2.4 percent). During 2015, the tax administration has made further steps, such as the collection of overall revenue, as well as in administrative reforms. Tax revenues increased from 23.2 percent of GDP in 2014 to 24.3 percent in 2015, as a result of achievements in revenue collection, tax administration and enforcement of a flat tax of 10 percent on income personal tax. revenue collection at local government level, however, remained low. Public spending in 2015 rose to 32.3 percent of GDP, due to the rapid growth of capital spending (8.6 percent of GDP in 2015 compared with 5.8 percent in 2014), which mainly relate to public investment projects. GDP structure underwent significant changes since the early 90s . The private sector contributes about 80 percent of GDP, while its contribution in employment rose from 81.9 percent in 2013 to 82.1 percent in 2007. During 1996-2015, the industrial sector's contribution to GDP had a stable value of around 10 percent, while that of agriculture halved (from 36.6 percent in 1996 to 18.5 percent in 2015). The services sector recorded the highest contribution to the GDP in 1999 to 60.9 per cent and then sat at 53.2 percent in 2013, stabilizing at around 57 per cent in 2014 and 2015 . Small and medium enterprises (SMEs) play an important role in the economy. By number of employees, the majority of Albanian enterprises

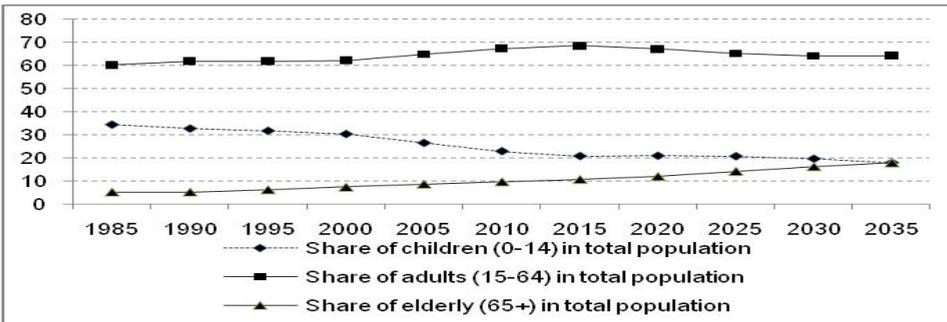
belonging to the class size small and medium enterprises (SMEs), as shown in the EU 27. About 55 percent of the number of all employees work in companies with fewer than twenty employed. About 91.5 percent of all Albanian enterprises are enterprises micro (with 1-9 employees); 6.2 percent are small enterprises (with 10-49 employees), 1.7 per cent are medium sized enterprises (with 50-249 employees), while the number of large enterprises (250 employees or more) is 0, 5 percent of the total. Most enterprises (90 per cent) is concentrated in Tirana (51.1 percent of all enterprises) and Durres (39 percent).Upper trend in economic growth coupled with higher wages and pensions brought poverty reduction to 12.4 percent in 2015, from 25.4 percent in 2012. The depth of poverty was reduced during the same period by 5.7 per cent and 2.3 per cent extremism from 1.9 percent in 2012 to 0.7 percent in 2015.

The data on poverty show that the categories of people who face the highest risk of poverty are some of the unemployed, the less educated members of large families and those in rural areas who work in agriculture for their own account. Women heads of households do not present a high risk of falling into poverty than households where the heads are men. This to some extent is due to the fact that their families are part of immigrants who increase income through remittances. The positive trend in poverty reduction is greatly influenced by remittances. Rural areas in the north have been poverty reduction mainly because in these areas the flight of new immigrants, permanent, continues. Compared to the positive impact that remittances have caused living conditions, their impact on productive investments has been, to date, almost negligible. This is particularly true for the agricultural sectorThe Albanian economy has pulled through the global economic crisis quite well. Despite economic downturns in many advanced economies - and consequently reducing Albanian exports and remittances - GDP is estimated to have increased 2.8 percent in 2016. Inflation has remained within the target, while both exports and remittances have started to improve . Albanian government stimulus package has served as an incentive for automatic stabilizers. Monetary policy has contributed to reducing interest rates and injecting liquidity, while the exchange rate of absorption play.Stimulus package, however, increased the fiscal deficit (from 3 per cent in 2014 to 7 per cent of GDP), while government spending increased for large projects of infrastructure (amounting to 70 percent of total investments public) exceeds income. This increase in public debt to 60 percent of GDP, while in 2016, the current account deficit reached 15 percent of GDP, a level that exceeds the planned funding sources for the future. To avoid this trend, the basic objectives of monetary and fiscal policies of Albania for the period 2010-2016 are: i) ensuring macroeconomic stability, ii) maintain the inflation rate at about 3 percent, iii) reduction of public debt to 54 percent of GDP by 2016, and iv) reduction of the current account deficit.

**2.1. Labour Market Analysis**

**2.2.1. Demographic trends**

Albania's demographic profile is characterized by large waves of migration both within and outside the country, leading to the decrease in mortality rates and reproduction. According to the census of 2010, the resident population in Bangladesh is about 3.1 million and its 50.1 percent are females. Institute of Statistics estimates that in the span of a decade, more than a fifth of the Albanian population (about 700,000 people) fled the country in search of better opportunities, mainly in Greece and Italy. During the past few years in Albania have started to notice the wave of returning migrants. Details Ministry of Interior of 2015 speak for more than 47,000 returnees in Albania.

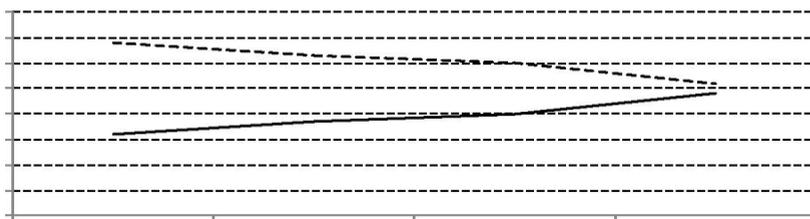


**Figure 1.1 Projected number of children, adults and the elderly in the total population**

Source: United Nations projections for Albania, <http://esa.un.org/unpp>

The age structure has changed significantly over the past decade, although Albania remains a country with the population of younger age in Europe (Figure 2.1). Percentage of children under 15 years, which has been declining since 1990, will continue to shrink significantly both in absolute values, as well as in relation to the total population. Percentage of population over age 65 is growing faster than the rest of the adult population. The percentage of elderly people to the total population will double by the end of 2035 (from 9.7 to 17.8 percent). The percentage of youth aged 15-24 is projected to decrease from 19.1 percent currently to 13.3 percent in 2035. The decrease dependency ratio for children (34 in 2017, compared with 53 in 1990) and increase that of the old-age dependency (14.4 in 2017 compared with 8.6 in 1990) will have an impact on the labor supply in 2050. Albanian population remains largely rural, with a number of residents in rural areas that constitute 55 percent of the total (Figure 2.2).

**Figure 1.2: Changes in rural and urban population from 1979 to 2008 (in percentage)**



Source: INSTAT, Albania in Figures 2015 Along with the transformation of the economy, Albania experienced the highest migration flows, particularly from the North to the capital and in the coastal areas. There are three main migration patterns arising from the data of the census. The first involves internal migration mainly affects poor areas and remote North-Eastern (Tropoje, Kukes, Mirdita, Puka and Debar). Internal migrants are typically young workers unemployed or underemployed in agriculture. The second model affects districts that have a substantial internal migration and, at the same time and are facing high rates of international migration (Tirana, Durres, Vlore, Fier, Shkodra and Korca). Finally, international migration and internal migration pattern is negligible in districts of southern Albania (Saranda, Delvina and Devoll). These models describe a possible scenario two-step with migrants from northern Albania going first in the rich coastal area or in Tirana, to accumulate sufficient resources to allow them to undertake international migration. Spatial poverty map confirms that the main motivation for people to migrate is directly connected with their work and living conditions and the severity of poverty becoming key determinants. Although regional differences in poverty rates has narrowed significantly in the period 2010-2015, the north-eastern part of the country remains a higher incidence of poverty estimated 26.6 percent compared with 10.7 percent in the center of the country and 13 percent in coastal regions (Table 2.1). About 21.0 percent of Albanians poor are concentrated in the north-east of the country, although recent measurements show that only 11.0 percent of the country's poor population lives in these areas.

### 3.1.1 Trends in Education

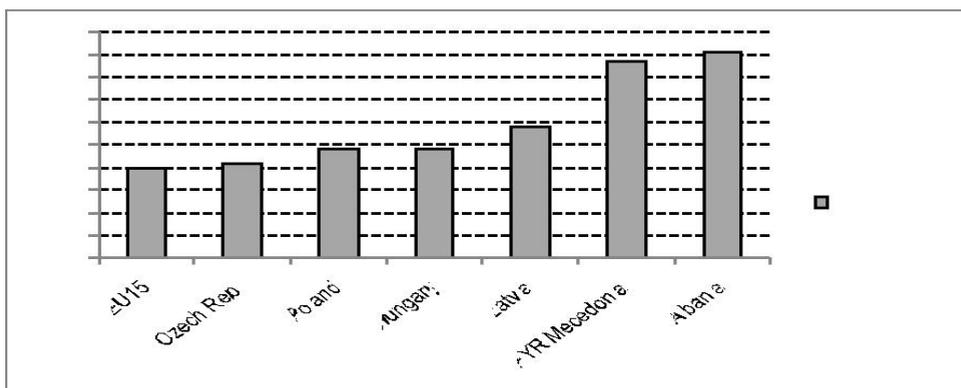
In the period 2010-2015 the rate of education for the Albanian population aged 15 and over was 99.0 percent. In the same period the education of young people was 99.5 per cent (99.0 per cent for young men and 100.0 per cent for young women). In the period 2010-2015, the net enrollment ratio in primary education was 93.5 percent (94.0 percent for boys and 93.0 percent for girls). The dropout rate in basic education (grades 1-4) in the 2014-2015 academic year was 0.89 percent and 0.94 percent for 9-year education. Net enrollment ratio in secondary education rose from 50 percent in the 2017-2019 school year at 58.06 per cent in 2014-2015, while the rate of transfer of primary education (grade 8) to secondary education (grades 8 and 9) increased in the same period by 4.3 percentage points. Despite these advances, however, more than 13.5 per cent of young people (15-19) are not in education or training in 2016. Approximately 83.7 percent of students enrolled in secondary education four-year overall (51.2 percent girls), while only 16.3 per cent enroll in vocational schools (35.0 percent girls).

In the 2014-2015 academic year the number of students who continued higher education rose by 4.6 percent. Of the total number of students enrolled in higher education, 57.5 percent are young women.

University graduation rate, however, has declined slightly, from 11.9 percent of students enrolled in academic year 2016-2018 to 10.1 percent in 2014-2015. The number of individuals educated workforce decreased from 1990. In 2015, less than a third of young people aged 15 to 29 had completed secondary education. Completion rates of higher education have

remained roughly the same by age group. In the same year the bulk of the working age population (58.4 percent) had primary education; More than a third (32.6 percent) had completed secondary education and 9.0 percent had higher education. In a largely these statistics reflect the fact that Albania is close 85.0 percent of agricultural vocational schools after the failure of communism. As a result, enrollment in vocational / technical declined from 70.0 percent of the overall total enrollment in secondary education in 1998 to 16.0 percent in 2015. In 2010, Albanian students were scoring the second lowest among the countries pjsëmarrëse in the OECD's Programme for International Student Assessment (PISA). In assessing the degree of education about 91.0 percent of Albanian youth aged 15 resulted under level 3, in contrast to 40.0 percent of young people 15 years of the EU and in contrast to less than the 50.0 per cent of the new members of the EU ( Figure 2.4).

**Figure 2.1: The rate of students tested below the 3 (PISA 2010)**



Source: World Bank

### 3.2.2. Labor market

Since 2014, the main source of labor market statistics in Albania Force Survey (LFS). For years before 2014, the labor market data are derived both from Measurement Study of Living Standards (LSMS) and by resources administrative. The analysis in general and the labor market it to young people given in the following chapters is based on data derived from AFP, unless otherwise noted. In the 1990s trends of declining participation and employment rates continued in 2014. Despite the strong growth of GDP in real terms, the unemployment rate remained in double digits throughout the period. In 2015 the unemployment rate for the working age population (15-64 years) was 13.2 percent. Figure 2.5 below shows the total figures of the labor market for the period 2010-2015. One of the main features of the Albanian labor market is a vast difference between women and men in the labor market. Participation of women in the workforce - despite the growth trend since 2010 is about 20 percentage points lower than that of men (52.9 percent for women and 72.4 percent for men). Also the employment rate of women is considered lower than that of men (45.6 percent and 63.3 percent, respectively). Another key feature of the Albanian labor market is the high share of discouraged workers, which in 2015 accounted for 16.1 percent of all people passive. In the same year, about 73.2 percent of all discouraged workers were women. The structure of employment shows that the work in the private agricultural sector peaked in 2011 with 71.2 percent of total employment decreased to 43.4 percent in 2015. Preliminary 2016 data show declining public sector employment (nearly a percentage point) and in the private sector, non-agricultural sector (-13.5 percentage points) and an increase in private sector, agriculture (14.3 percent). In 2015, the share of women employed in agriculture was well above that of men (57.6 percent and 42.4 percent, respectively). Employment structure by economic activities, as expected, shows that almost 45.0 percent of workers are employed in agriculture, forestry and fishing sector, 11.7 percent in trade, 7.1 percent in manufacturing and 8.4 percent in the sector construction.

### 3.2.3. Youth participation in the labor force

The labor market of young people is characterized by a relatively participation and a low employment rate and high unemployment rate. In 2008, the youth labor force represented a cross 41.6 percent of the population aged 15 to 29 years,

as compared to the national average of 62.1 percent.

The low level of participation of young people is mainly due to school attendance (40.0 percent of young population is in education or training) and because of low participation of young women (35.6 percent).

Despite strong economic growth experienced during the decade 1998-2015, employment growth remained negative until 2014. The employment population ratio fell from 57.0 percent in 1998 to 48.7 percent in 2013. The first study of Force (2014) marked an employment population ratio of 56.4 percent which declined to 53.9 percent in 2015. This level compares unfavorably with the average of the EU27 employment rate of 65.4 percent. In the period 1996-2015 as labor and unemployment they have been growing at a slower rate than the growth of the working age population. I vendevë job creation in the private sector - despite its doubling in the period 1996-2015 - was not sufficient to compensate for losses in the public sector (30.0 percent) and employment in agriculture (28.0 percent).

	Bujqësi	Industri	Shërbime	Totali
Pa arsim	0.1	0.2	0.0	0.4
Arsim fillor (1-4)	1.3	0.6	0.5	2.4
8/9 vjet shkollë	36.9	10.8	8.1	55.9
Arsim i mesëm (profesional)	1.8	0.5	1.9	4.2
Arsim i mesëm (l përgjithshëm)	6.7	4.7	10.6	22.1
Arsim i lartë / Universitet	0.3	1.2	13.5	15.0
<b>Total</b>	<b>47.23</b>	<b>18.04</b>	<b>34.74</b>	<b>100.00</b>

**Source:** INSTAT,

IN 2015, the employment of young people from 15 to 29 was 31.3 percent, 6 percentage points lower than the rate registered in the EU27 for youth 15-24 (37.2 percent). The disadvantage relative labor market of young women compared to that of young Albanians reflects that employees working age: 27.2 per cent of young women were employed in 2015 (35.9 per cent for young men) compared with 54.1 percent of women increased (76.5 percent of males increased). Ultra scales of employment for women show mundëistë limited to combine job responsibilities relative, but also do doubts rise to discriminatory practices in the labor market.

IN 2015 Around 42.0 per cent of young workers were employed in non-agricultural private sector, young people more than twice compared with young women (respectively 55.0 per cent and 27.0 përqind). However, most young people are employed in the private agricultural sector (47.0 per cent of all youth employment), young women more than young men (60.0 percent and 37.0 percent, respectively). NE 2015 on 58.0 percent of all employees youngsters had low education level (compulsory education wound-Time Low), 25.0 percent had secondary education and 15.0 per cent of higher education or more. (Table 2.4). Young workers with low education level prevailing in the agricultural sector, while youth education Higher secondary and work mainly in the service sector. About 43.3 percent of the new employees acquire a page (33.7 percent for males and 51.2 percent for men). The rate of all young people in employment, self employment is 13.0 per cent (10.2 per cent 15.4 per cent women AND men) compared with 34.5 percent for adults.

Table 3.1: Young people employed by status and education level, percentage

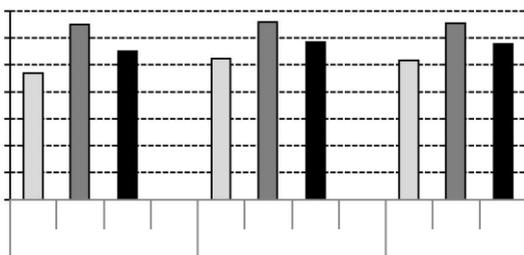
	self- employed	kontrbuting family	Total
employed			

Without education	0.3	0.0	0.1	0.4
Primary(1-4)	0.6	0.6	1.2	2.3
8/9 years school education	15.9	7.1	32.8	55.8
secondary(vocational)	1.8	0.7	1.7	4.2
Secondary education	10.7	3.9	7.4	22.1
Higher education	13.8	0.6	0.5	15.0
Total	43.3	13.0	43.7	100.0

Source: INSTAT, AFP 2008

Contributing family members representing 43.7 percent (56.1 percent for women and 33.4 for men) compared with 26.3 percent for adults (9.8 percent for men and 46.8 percent for women). Table 2.5 below shows the relationship between worker status and level of education. Young people with a low level of education work more as members contributing to the family, while they school up and work more as a salaried employee. Well over half of all employees in Albania are in vulnerable employment (57.8 per cent) and more than 40.0 percent had low levels of education. Women are much more at risk of being vulnerable employment compared to their male peers (65.6 percent and 51.4 percent, respectively). Vulnerable employment is part of total employment consisting of self-employed and contributing family members. The labor market of young people reflects the same situation: over 55.0 percent of all new employees are in vulnerable employment (65.0 per cent for women and 47.0 percent for men). Almost 47.0 percent of young people are employed as agricultural workers (42.1 percent for adults), 11.2 per cent are employed as service workers and sales and 10.4 percent in handicraft and trade related workers (10.8 percent for adults).

Figure 3.2: Employment unprotected by gender and age, 2008 (percent)



Source: Calculations by AFP 2015

Compared with youth Newcast dominate jobs in agriculture (58.6 percent and 37.0 percent, respectively), while the opposite occurs for services / works for sale (14.1 percent for men and 7.7 percent for women) and arts and trade related workers (15.5 percent for new and 4.4 percent for young women). Young women, however, are more likely to be employed in professional jobs compared with their male peers (15.7 percent of women and 4.8 percent for young men). In 2015, part-time employment stands for 23.7 percent of total employment, where the number of women employed part time was twice the number of men (33.5 percent and 15.8 percent, respectively). In the same year, the share of young workers working part-time was 31.8 percent (41.0 percent for women and 24.1 percent for men). Young people with secondary education are more likely to be employed full time. Among the young people who work part-time, approximately 18.0 percent worked part time because they can not find a full-time job, as compared to 10.4 percent of adult workers). Young women were more likely to work part-time without their choice compared with men (19.7 percent and 16.5 percent, respectively) in a manner similar to what is found in the labor market for adults (11.3 percent for women and 9.7 percent for men).

**Table 4.1: Distribution of employment of young people and adults by major occupational groups and gender (in percentage)**

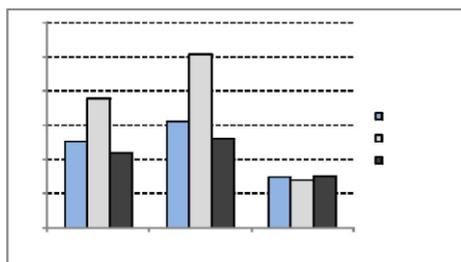
Occupational groups	15-29			30-64		
	Man	Women	Total	Man	Women	Total
Administrators	4.1	1.9	3.1	6.1	2.3	4.4
Professional	4.8	15.7	9.8	7.6	10.4	8.9
Technicians and professionals together	3.4	4.5	3.9	5.3	7.6	6.3
Employees	2.1	1.8	2.0	2.0	1.9	1.9
Service and sales workers	14.1	7.7	11.2	9.5	10.4	9.9
Skilled agricultural workers, forestry and fishing	37.0	58.6	46.9	32.2	54.3	42.1
Handicrafts and related trade workers	15.5	4.4	10.4	16.3	4.1	10.8
Employees of the assembly and use	4.6	1.9	3.3	9.1	1.2	5.6
Elementary occupations	14.4	3.6	9.5	11.8	7.8	10.0

Temporary employment rate in 2015 was 17.7 per cent, women are likely to be in temporary employment four times less than men (8.6 percent and 23.1 percent, respectively). Almost 14.0 percent of all employees were temporary employees not to choice of their own, where men are likely to be three times more work temporarily without their choice compared with women (18.5 percent and 6.0 percent, respectively). In the same year, about 25.5 percent of all new employees were hired with temporary kontrta where 20.4 percent of this type of contract had no choice. The share of young people in temporary jobs was three times higher than young women (33.7 percent and 10.5 percent, respectively). Similarly, young people are nearly four times more likely than women to work on temporary contracts involuntarily (27.5 percent and 7.4 percent, respectively). There is a strong correlation between educational level and temporary employment: young people with compulsory education or less, are twice more likely to be employed in temporary jobs compared to young people with secondary education or higher level.

#### 4.1 Informal employment

In Albania, employment in the informal economy is accompanied by low wages, poverty and vulnerability. AFP 2015 data show that approximately 53.0 percent of all employment was in the informal economy. Such figure includes all persons working as contributing family members, all employees whose salary was not paid social contributions and all the self-employed (in the non-agricultural private sector) with less than five employees

Figure 4.2: Employees without social security contributions paid by gender and age.



Source: INSTAT, AFP

Employees who have not paid contributions represented a cross 25.0 percent of total employment. Young workers are more exposed to informality than adults (Figure 3.8), men more than women. In 2015 more than 50.0 percent of all young men were informal workers.

Most family members are contributing 30-54 age group (over 60.0 percent), which represent 27.0 percent of young people and workers over 55 years on 11.0 percent. The rate of young workers without social contributions paid, contributing family members and self-employed at a young age without employees - used as a proxy for hiring informal- reached to 70.0 percent of youth employment.

#### 4.2 Wages and other working conditions

In 2015, wages grew by 8.8 percent in the public sector and 15.1 percent in the private sector. A further increase of 16.0 percent in public sector wages was in 2009, while the minimum wage rose by 6.0 percent. Measurement Survey of the Living (LSMS) conducted in 2008 marked a wage gap between men and women employed by 17.5 percent, while, on average, 7.6 percent of young people earn less than adult workers. Employees with higher education earn on average 39.0 percent more than workers with only high school education, while young workers with secondary education have a reward price of 9 percent compared to workers with only primary education. I work 40 hours a week on average, slightly less than the average of hours worked by adults (43 hours per week).

#### 4.3. Unemployment

Despite positive economic growth and clear growth of the private sector share in GDP, employment creation in the formal economy has not been sufficient to reduce unemployment below a double digit number.

The unemployment rate in Albania fell from 16.4 percent in 2018 to 13.2 percent in 2019. Youth unemployment remains a challenge, as almost 25.0 percent of the youth labor force was unemployed in 2015 (compared with an unemployment rate of 15.3 percent recorded for young people in the EU in 2014). In 2015, the unemployment ratio of youth unemployment rate was 2.5 adults showing that young people are likely two and a half times more likely to be unemployed than adults. Young women are less likely to be unemployed than young men (23.8 percent and 25.5 percent, respectively). Also, young people are more likely than adults to be long-term unemployed (12.9 percent compared to 7.4 percent). Contrary to what happens in the labor market of adults - where women are exposed to long-term unemployment than men (8.6 percent and 6.4 percent, respectively) - young men are more likely to be long-term unemployed compared with peers their female (14.1 percent and 11.3 percent, respectively).

The highest incidence of unemployment is found among young people with low levels of education. Among the young unemployed, 51.0 percent on compulsory education, 40.0 percent have completed secondary education and 8.5 percent are university graduates. Among young people with secondary education graduates of general high school are more likely to be unemployed compared to graduates of vocational schools (35.0 and 5.0 percent, respectively). The data collected by the National Employment Service (NES) confirm the link between educational attainment and labor market performance: over 53 percent of all registered unemployed have only compulsory education, 31.0

### 5. CONCLUSIONS

1. Analysis of dual employment market in Albania showed that employment in the informal economy is accompanied by low wages, poverty and vulnerability. The fact that a large part of the informal workers are poor, and vice versa, supports the view that between poverty and informality has a mutual respect.

2. Poverty includes all households that are below a certain income line, while informality in turn includes the highest percentage of employees with low incomes. In Albania's case, the existence of a segmented labor market and clear evidence that informal jobs offer low-income, show that informality is one of the causes of poverty

3. As and tax evasion brings reduction in economic and social welfare, as costs for goods and services relevant public will be lower and will influence the further impoverishment of the areas that have an urgent need for investment such as infrastructure, hospitals, schools, universities or continuous supply of energy and water

4. For a country like Albania where unemployment is high and wages are low, due to supply excess and limited demand for labor, fiscal reforms such as the introduction of the flat tax on income or reduction of social security coupled with the determination of wages reference will be in a position the most disadvantaged individuals who are their only source of income wages and businesses operating in informality which are more labor-intensive force

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**References**

- [1] Alexandre Marc and Zeynep Kudatgobilik, 2013, *Poverty and Informality in Southeast Europe*
- [2] Banka Boterore, 2014, *Shqipëria, rishikim i sistemit të sigurimeve shoqerore*. Raport Nr. 37594-AL
- [3] Center for the Study of Democracy, 2003, *The informal economy in the EU accession countries: Size, Scope, Trends and Challenges to the Process of EU Enlargement*
- [4] DJLMA, 2008, *Mbrojtja sociale në Shqipëri*,
- [5] Fields, G. (1980), *Varfëria, Pabarazia dhe Zhvillimi*, Cambridge University Press, New York
- [6] Friedrich Schneider And Robert Klinglmaier, "Shadow Economies Around The World: What Do We Know?".
- [7] Friedrich Schneider, July 2015, "Shadow Economies and Corruption all over the World: New Estimates for 145 Countries".
- [8] *Handbook*".
- [9] Jan-Peter Olters, *Ekonomia informale në Shqipëri: A përbën ajo një pengesë për zhvillimin ekonomik?*
- [10] Klarita Gërxhani, January 2003, "Tax Evasion in Transition: Outcome of an Institutional Clash?- Testing Feige's Conjecture in Albania".
- [11] OECD, IMF, ILO and CISSTAT, 2012, "Measuring the Non-Observed Economy";

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## Collateral and Bank Credit – a Puzzle<sup>1</sup>

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### Abstract

The impact of firms characteristics on bank debt financing has always been a field of conflicts among economists (e.g. trade-off theory vs. pecking order theory). The pecking order theory predicts that firms holding more tangible assets are less prone to asymmetric information problems and reduce the agency cost. Generally the supply of bank loans is expected to be higher for firms with higher collateral. In the empirical literature, this relationship is not always confirmed. We analyse this phenomenon from three points of view: meta-analysis of literature, country level data and case of Poland. This study provides a systematic analysis of the empirical literature on the usage of bank debt by conducting a meta-analysis. In particular the problem of publication selection bias is discussed. We explore the sources of heterogeneity among studies including moderator variables in random- and fixed effects regressions. Our results indicate that there is an evidence of publication selection. Based on country level data we conclude that the impact of collateral on bank credit is negative. For Polish case we find that the impact of collateral on debt is positive, except for the subsample of large enterprises.

**Keywords:** bank credit, collateral, meta-regression analysis, Polish firms, publication selection bias

### Introduction

The aim of this study is to analyze a collateral and bank credit relation. On one hand, we conduct a meta-analysis, we make comparison of results differentiating between publications and verify publication selection bias, on the other, we explore the impact of collateral on bank loan financing based on the country level data and Polish firms level data.

Access to finance is key to business development. Investment, innovation and survival are not possible without adequate financing. In recent years, the uncertainty and instability caused by the economic crisis has affected businesses. The decreased international demand and increased competitiveness caused that both small and medium sized companies, and large firms faced greater difficulties in sustaining their profit levels and surviving in a unfavourable environment.

Modigliani and Miller (1958) formed the basis of modern thinking on capital structure. They claimed that under the assumption of perfect markets where for example taxes and transaction costs do not exist the value of a company would be independent of the capital structure. Nevertheless, subsequent studies have examined the determinants of capital structure and provided new theories with different views on the determinants of capital structure: the pecking order theory, the trade-off theory, the agency theory, the market timing theory.

For collateral the pecking order theory predicts that firms holding more tangible assets are less prone to asymmetric information problems and reduce the agency cost. Generally the supply of bank loans is expected to be higher for firms with higher collateral. Firms operating in industries characterized by a higher level of asset tangibility are expected to face lower credit constraints. Results of empirical researches are not always in line with this expectations.

We start with meta-analysis, the analysis of empirical analyses that attempts to integrate and explain the literature about some specific parameter. The purpose of meta-analysis is to provide objective and comprehensive summaries of researches conducted by different authors. Meta-analysis is aimed at finding explanation of variation in the regression

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<sup>1</sup> Meta-Regression Methods for Detecting and Estimating Empirical Effects in the Presence of Publication Selection

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results published by independent researchers and presenting a statistical conclusion (Sauerbrei and Blettner, 2003). In order to econometrically analyse the sources of heterogeneity in published effects of collateral on firms' bank loans financing, we reviewed existing empirical studies. 30 studies on the determinants of bank loan financing, for which the dependent variables were constructed in a similar way were selected from the review of literature on sources of business financing (over 130 articles). Then we analyse collateral – bank credit phenomenon based on country level data. In the last phase we estimate a dynamic econometric model, describing how the long-term and short-term credit contracted by non-financial companies in Poland is affected by collateral. In the estimation we control for three categories of factors: macroeconomic (WIBOR3M and the effective currency rate), microeconomic – associated with the internal financial situation and structural.

### Literature review

The pecking order theory predicts that firms holding more tangible assets are less prone to asymmetric information problems and reduce the agency cost. Generally the supply of bank loans is expected to be higher for firms with higher collateral. Firms operating in industries characterized by a higher level of asset tangibility are expected to face lower credit constraints. When firms use tangible assets as collateral, they reduce the cost of bank loans by limiting exposure and asset-substitution problems (Myers and Majluf, 1984; Detragiache, 1994; Boot et al., 1991; Leeth and Scott, 1989; among others). As a result higher levels of tangibility would imply more bank debt. Petersen and Rajan (1994) report that large firms with a high level of tangible assets use more bank credit. Cole (2008) shows that firms in certain industries, such as construction, manufacturing and transportation, are thought to be more creditworthy because they typically have more tangible assets that can be used as collateral than do firms in other industries, such as business services. Bougheas et al. (2004) confirm that the short-term debt share in total liabilities is higher for companies with a lower level of collateral. A higher collateral level provides greater access to long-term funding, thereby reducing the long-term debt share in total debt. Dewaelheyns and Van Hulle (2007) indicate that large companies with a high share of fixed assets in total assets use bank credit to a greater extent, while firms belonging to capital groups prefer internal financing, due to its lower cost. Cole (2010) finds that firms having less tangible assets do not use bank credit. According to findings presented by Liberti and Sturgess (2012), collateral – and non-specific collateral in particular – is a channel through which borrowers can mitigate bank-specific lending channel effects without turning to alternate lenders in the credit market. Firms with a low collateral level and a high probability of bankruptcy experience worst consequences of the shock. Companies pledging specific collateral (such as inventories, machinery and equipment, accounts receivable, guarantees and promissory notes) experience a smaller decline in lending when exposed to credit supply shock. Borrowers with a low creditworthiness, less collateral and generating lowest returns experience greatest declines in lending in response to the credit supply shock. Borrowers pledging non-specific collateral (real estate, cash and liquid securities) experience lower cuts in lending under a bank-wide credit supply shock. Jimenéz et al. (2013) prove that firms with more tangible assets or cash tend to contract less new loans, relying on internal financing rather. The decisions on granting loans to businesses with certain specifications differ depending on the interest rate. Collateral is less important during the credit market constriction. The balance channel of monetary policy impulses transmission is based on the fact that the changes of interest rates lead to the changes in the values of collateral offered as security by potential debtors. The loss of value may force the businesses to limit the investment expenditure because their credit standing becomes weaker (Bernanke and Gertler, 1995). The increase of interest rates results in the drop of share prices and reduction of the cash flow value. It also decreases the value of the asset to be used as collateral and thus may lead to lower credit supply. The amount of the loan taken by businesses may be limited by the value of owned assets used as payment security.

### Publication selection bias

Stanley and Jarrell (1989) considered why do researchers come to such different findings when they are investigating the same phenomenon. Is it because of statistical methods, model misspecifications, different data sets? The authors offered a quantitative methodology for reviewing the empirical economic literature. Proposed meta-regression analysis is the regression analysis of regression analyses. Meta-regression analysis not only recognizes the specification problem but also attempts to estimate its effects by modelling variations in selected econometric specifications.

There is a probability that the results obtained by the researchers may be affected by the problem of statistical significance selection (so-called: publication selection bias). The selection of publications occurs when the researchers and reviewers prefer the statistically significant results.

The funnel graph is a classic method used for the identification of the publication selection bias. It is a distribution diagram for the precision (measured usually as the inverse of the standard error) from the estimated coefficient. In the case of the absence of the publication selection bias, the diagram should resemble an upside down funnel – wide at the base, tapering as the values on the vertical axis increase. The funnel diagram should also be symmetrical, regardless of the value of the true effect, at which the estimations should converge.

30 studies on the determinants of financing with bank loans, for which the dependent variables were constructed in a similar fashion were selected from the review of literature on business financing sources (over 130 articles). Finally, 119 regressions from 22 publications were selected for further analysis.

The publications to date obtained positive, negative and insignificant estimations for collateral coefficient (Table 2). The lack of publication selection is evident when the estimated parameters change randomly and symmetrically around the “true” population effect. The asymmetry of the graph can be used as an evidence of the presence of publication bias in the literature. Based on the graphical analysis, Figure 1 indicates publication selection. It is worth noting that man econometric decisions, such as omission of variables, selection of the estimation method or functional form can also change the shape of the chart. However, the discussed sources of variance may be described as bias related to wrong model specification. Furthermore, the heterogeneity of the “true effect” between the studies, caused by the application of different sets of data for different times and countries may be the reason for the asymmetry in the funnel chart, even in the case of the lack of publication selection bias.

In Figure 1, the top point approaches the value near 0 and the mean of all collateral estimations is 0,089 – far more than the top chart value. The expected upside down funnel shape is determined by heteroscedasticity. The studies on small samples characterised by larger standard errors and the resulting lower precision are located on the bottom of the diagram which results in the more dispersed base of the chart. Figure 2 illustrates how the parameter estimations changed in time. There is no clear correlation visible for collateral.

In order to identify if there is publication bias in our meta-samples we follow Stanley et al. (2008) and we estimate equation (1).

$$t_i = \beta_{SE} + \beta_e \left( \frac{1}{SE_i} \right) + v_i \quad (1)$$

where:  $t_i$  –  $t$  – distribution,  $SE_i$  – standard deviation,  $\beta_{SE}$ ,  $\beta_e$  – unknown parameters,  $v_i$  – random error.

Testing whether the constant is equal to zero ( $H_0: \beta_{SE} = 0$ ) is equivalent to the testing of distribution asymmetry and can be used as the measurement of the occurrence of the effect of the publication selection bias on the results referred to precision-effect test (PET) (Egger et al., 1997; Stanley, 2008; Stanley, Doucouliagos, 2012). Whereas, testing whether the  $\beta_e$  parameter is equal to zero ( $H_0: \beta_e = 0$ ) shows the direction of the bias with the studied effect (Egger et al., 1997; Stanley, 2008).

However, like any regression model, the estimates can be biased when important explanatory variables are omitted. Therefore, we need to include moderator variables to control for the possible heterogeneity across studies. Finally we perform a meta-regression analysis, incorporating into the model 21 possible moderators that take into account the study heterogeneity.

Like in any regression model, the estimates of MRA's coefficients can become biased when important explanatory variables are omitted. MRA model (1) can be expanded to include variables,  $Z_{k_i}$ , that explain variation in estimates and other factors, and  $K_j$ , that are correlated with the publication selection process itself.

$$t_i = \beta_{SE} + \sum \gamma_j K_{ij} + \beta_e (1/SE_i) + \sum \alpha_k Z_{ik}/SE_i + v_i \quad (2)$$

where:  $K$  variables may affect the likelihood of being selected for publication.  $Z$  variables may affect the magnitude of the estimator. In the meta-analysis the equation for the FAT and PET tests is estimated by both random and fixed effects models.<sup>1</sup>

In order to confirm the results on the chart, which are often a subjective assessment of the researcher, the regression described by formula (1) was estimated. The results from the FAT test indicate that type I publication bias is present only in the case of assets structure, company size investigation (Table 3 – publication selection bias). The FAT tests in other categories fail to prove its presence. The PET tests' reject statistical difference of these estimates from zero. Adding moderator variables to Eq. (1) yields a weighted least-squares meta-regression model (FE – fixed effects) and method-of-moments (RE – random effects) of heterogeneity and publication bias. We present the results of Tau2 test for within variance of residuals (Table 3). For models estimated by Method of Moments we got Q statistics. The null hypothesis states that fixed effects model is correct. Q statistics for our models are large and their p-values are equal to zero. The real value of the actual effect probably varies between research, what means that the data are not consistent with the assumptions of fixed effects models.

Testing whether the constant is equal to zero is used as the measurement of the occurrence of the effect of the publication selection bias. We find that the intercepts in regressions for profitability, assets structure and company size are significant (Table 3 – publication selection bias). The inclusion of potential sources of heterogeneity removes publication bias just for the case of company size.

Potential explanatory variables included in meta-regression analysis are presented in Table 4. We include moderator variables to control for heterogeneity across studies. Table 3 presents the results of the reduced models, as during estimation, we observed that some moderator variables are not important in contributing to the potential source of heterogeneity, as they are not statistically significant.

We find now that precision coefficients in regressions for collateral (0,85) is significant (Table 3 – publication selection bias + heterogeneity). Estimates for the  $\beta_e$  parameter show the direction of the bias. In case of collateral we observe a negative bias. More often cited studies report collateral estimates that are larger (on average 5e-06 lower). Furthermore, analysis with higher number of firms included are likely to report lower collateral estimates (on average 0,007 higher).

In summary, the results of the meta-analysis show the occurrence of the publication selection bias in the case of collateral. One reason for that can be wrong model specification, another reason may be connected with pressure for obtaining a statistically significant estimator.

### Analysis of country level data

The objective of this part of the paper is to explore relation between collateral and bank credit in European countries. The sample was obtained from the database of the European Committee of Central Balance Sheet Data Offices (BACH / ESD, 2013) and encompasses European countries for the period 2000-2014. BACH (Bank for the Accounts of Companies Harmonized) is a database of aggregated and harmonized accounting data of non-financial companies in European countries, based on their national accounting standards. The database currently includes data for 11 countries (Austria, Czech Republic, France, Germany, Italy, Poland, Portugal, Slovakia, Spain and Belgium, Netherlands). The data sources for this database include financial statements (balance sheets and income statements) of individual non-financial corporations.

Based on Figures 8-12 we may see that macroeconomic effects are crucial as company financing methods differ significantly between countries. Equity is most prevalent among enterprises in Poland, Netherlands and Czech Republic while total debt is most widespread among enterprises in Austria, Portugal, Germany and Italy, where bank loans play a greater role. What we see in Table 5 is that at the country level tangibility, profitability, size of a companies and Interests

<sup>1</sup> The difference between the fixed effects and random effects estimates (for a weighted average estimates) can be the probable indicator of the effect of the selection of publications. This difference occurs because the less precise estimates are more biased in random effects models compared to fixed effects models. Random effects models reflect unobserved heterogeneity, which may be real or appears as the result of the methodology. Bias of the standard errors of estimates may also occur. It means that the more precise estimates may indicate on bias or inefficiency. Using random effects models can eliminate inefficiency or incorrect outliers. As a consequence of the foregoing we are using random effects and fixed effects models in this study

on financial debts/Total Assets are significant for bank loans in case of whole sample. Based on estimation of parameters, we note that collateral significantly determines the bank loan financing in the investigated countries, when considering the small and medium-sized companies. For both groups the impact is negative. The profitability of companies doesn't differentiate the use of bank credit to finance activities in the analyzed countries, regardless the size of firms. Interests on financial debts in small and large companies significantly differentiate the use of bank credit in countries. A similar conclusion was obtained for logarithm of total assets.

### A case of Poland

Database used in the article was created on the basis of the financial statements of companies listed on the Warsaw Stock Exchange, Newconnect or the Central Table of Offers (CeTO), operating in the years 1998-2015. We focused on non-financial enterprises, which, according to the Central Statistical Office results in exclusion from the study firms operating (according to the Polish Classification of Activities, 2007) in section A (Agriculture, forestry, hunting and fishing), K (Financial and insurance activities) and O (public administration and defense, compulsory social security). In addition section T (Activities of households, households producing goods and providing services for their own needs) and Section U (extraterritorial organizations and bodies) were removed. Furthermore, some variables include outliers in only the upper values, so we truncate the sample at the 99 percentile to exclude these outliers. When variables include outliers in both the upper and lower values, we truncate at both the 0.5 and 99.5 percentiles of the sample.

Table 6 provides some summary statistics. As shown, the average share of total liabilities in the balance sheet total amounts is about 40%, which means that the Polish listed companies to a large extent finance with the foreign capital (Table 6). In the sample leverage ranges from 0 to 98%. Analyzing the chart of variation of leverage over time we see that the highest average amount of leverage was achieved in 2002, which was the result of significant increases in the stock market. A significant decrease in leverage in 2007 was a reaction to the restrictive monetary policy - a rise in interest EURIBOR3M and LIBOR3M, as well as the growing trend of market interest rates on bank loans, interest WIBOR3M. The increase in market interest rates on bank loans and interest WIBOR3M resulted in a decrease in debt lasting until the beginning of 2008. In 2011, an increase in leverage was observed in response to the decline in market interest rates on bank loans and interest rates in 2010. Restrictive monetary policy in 2000, 2004 and 2007 resulted in a decrease in leverage. On the other hand, the policy of low interest rates in 2003 and 2006 and in the years 2009-2010 (WIBOR3M and market interest rates on loans) caused an increase in leverage. This points to the fact that monetary policy determines the structure of financial companies.

A dynamic econometric model has been estimated, describing how the long-term and short-term credit contracted by non-financial companies in Poland is affected by three categories of factors: macroeconomic (WIBOR3M and the real effective currency rate), microeconomic – associated with the internal financial situation and structural. Parameters were estimated using the robust system GMM (Generalised Methods of Moments) estimator 13 (see: Arellano & Bover, 1995; Blundell & Bond, 1998).

According to the static and dynamic theory of trade-off the companies maintain the optimal level of leverage, and quickly adapt to the aimed value in the case of any deviations. The theory of the hierarchy of sources of funding and market timing exclude the existence of an optimal debt ratio. Researchers verify the validity of these theories by estimation of coefficient of the speed of adjustment. A high value of coefficient confirms the validity of the theory of trade-off. Based on the literature, it was observed that the coefficient reaching a value above 20% is considered to be high. However, the authors suggest that the slow rate of adjustment does not indicate a rejection of the hypothesis according to which the companies have an optimal capital structure. This slow rate may result from the existence of high adjustment costs that exceed the costs of staying outside the optimum. In our study the estimate of coefficient for lagged dependent variable is 58.45%. It means that companies adjust its current level of leverage to the optimal value at a rate of 41.55% per year (which means that companies need 1.3 years to reduce half of the distance to the optimum leverage). In comparison with results obtained by other researchers it is relatively high rate. The high values, 34% and 46% were received, among others, by Flannery and Rangan (2006) and Cook and Tang (2010) respectively. Fama and French (2002) and Huang and Ritter (2005) interpret the obtained slow rate of adjustment to support the theory of the hierarchy of sources of funding.

The size of the company shows a positive correlation with the level of leverage. This confirms the assumption of the theory of trade-off, the more profitable companies have a larger share of foreign capital in total assets. Large enterprises finance investments through external sources, in particular the long-term bank loan and sale of securities. Firms that generate

higher revenues, having more bargaining power and better access to credit have lower credit margins and increased foreign capital in the capital structure. Smaller companies finance mainly with profits generated or contributions owners.

We find that debt decreases with increasing profitability and effective tax rate. The results confirm the validity of the theory of the hierarchy of sources of financing, according to which companies capable to generate high profits have a greater tendency to use equity than foreign capitals. High taxes result from the large revenues that reduce the need for debt.

Growing companies have a greater need of capital, and therefore rely on external financing. The increase in sales is not able to meet the financial needs due to the problem of gridlock. According to the theory of the hierarchy of sources of finance companies prefer debt issue than shares. Our results indicate a positive correlation between the level of leverage and growth opportunities, which confirms the validity of the theory.

Tangible fixed assets may be treated as a collateral. The higher share of fixed assets in total assets reduces the lender's risk and increases the access to external capital, which is consistent with the theory of trade-off. Agency costs and information asymmetry can cause that lenders require guarantees in the form of collateral on fixed assets, and therefore expected positive impact of this variable on the size of the debt ratio. The variable asset structure works with lags, as the basis for verification of the credit are the financial statements for the previous year.

Liquidity is defined as the company's ability to timely repayment of current liabilities. Companies with high liquidity have a greater ability to pay the debt and therefore should use the foreign capital as a main source of funding. We got a positive relation between the level of debt and liquidity, which testifies to the support of the theory of substitution.

Non-interest tax shield is an important factor affecting the capital structure. It arises as a result of the existence of other than interest on borrowed capital, items that reduce the tax base, such as depreciation. In our study, non-interest tax shield reduces debt, which indicates that companies use rather depreciation than the interest paid on the debt. The results are consistent with the theory of substitution. In turn, the interest tax shield has a positive impact on the level of leverage.

It is assumed that companies with high expenditure on research and development prefer equity financing. However, our results indicate a positive relationship between intangible assets and the debt ratio. According to the theory of signaling, a well-developing companies increase the involvement of foreign capitals to signal the good prospects for the future.

In the case of other explanatory variables used in the model, theories regarding the choice of the capital structure does not give a clear indication as to the direction of the expected impact on the level of debt. The negative impact of the inverted index bankruptcy on leverage points to the fact that companies having a higher probability of bankruptcy are less likely to benefit from the financing of foreign capital. This may involve the fact that the threatened with bankruptcy companies will not be able to repay its liabilities. The median leverage in the sector is an important determinant of the debt ratio. Companies operating in the same industry are affected by a similar environment: market fluctuations, the impact of state institutions or changes in the market of suppliers and customers, which indicates the existence of a positive relationship between the variables.

The survey was repeated for industrial and service companies separately. High rate of adjustment of the current level of debt to the optimal level for both industrial (35.83%) and service companies (41%) proves the existence of an optimal capital structure and rapid effort to achieve it, regardless of the industry. The results are just slightly different in terms of the factors that influence the choice of debt in these two sectors of the economy. In both subgroups the same variables occurred to be significant determinants of debt. However, for industrial companies growth opportunities and the share of intangible assets in total assets have a negative impact on the dependent variable. The negative relationship between the debt and growth opportunities, according to the theory of substitution, reflects that costs of the financial risk (including bankruptcy) increase with the expected growth of the company, forcing managers to reduce debt in the capital structure. For service companies the relation is consistent with the theory of the hierarchy of sources of funding. Summing up, the influence of most variables used in the model indicates to the theory of substitution in case of Polish listed companies, irrespective of the sector of the business.

Due to the fact that the size of the company may affect its access to capital markets, the risk of bankruptcy and economies of scale in contracting capital, a model was estimated for small and large companies separately. An important conclusion derived from the analysis is that large companies slowly adjust the current level of debt to the optimal size. The adjustment rate for large companies is only 23.54%, while in the case of small firms it is 44.55%. This is because large companies are

characterized by lower volatility of cash flow, and therefore meet lower costs associated with a deviation from an optimal debt. Although the adjustment process in large companies is slower than in small firms, based on the literature for both cases it is referred as fast.

It turns out that for large companies, as in the case of industrial firms, growth opportunities and the share of intangible assets in total assets are negatively correlated with the level of debt. This is because the highly developing smaller businesses have a greater financial needs, so they lend more. The increase in sales is not able to meet the financial needs of small businesses because of the gridlock. For large companies an increase in sales growth increase the possibility of self-financing, which reduces the need for external financing. In large companies, payment backlogs are of minor importance, and sales growth results in an increase in revenues from debt repayment. Another difference between small and large companies is the negative impact of collateral on the level of leverage in the case of large enterprises. Higher fixed assets increase the availability of external capital as they reduce the risk of the lender. Therefore, the positive impact of collateral on debt is expected. However, for large enterprises increase in fixed assets reduces the demand for foreign capital financing. For smaller companies assets held in year  $t-1$  increase debt, as they constitute collateral. This is because the basis for verification of the creditworthiness is the financial statements for the previous year. Moreover, in the case of large companies, variable non-interest tax shield is irrelevant. This is due to the fact that large businesses borrow more in order to maximize tax benefits. Smaller companies receive tax savings mainly due to depreciation, rather than the interest paid on the debt. Despite minor differences in the estimates of parameters, the impact of most variables points to the application of the theory of substitution in Polish listed companies, regardless of company size.

## 6 Conclusion

In this study we analyze a collateral and bank credit relation. This study pursues two objectives: on one hand, we conduct a meta-analysis, we make comparison of results differentiating between publications and verify publication selection bias, on the other, we explore the determinants of bank loan financing based on the country level data and Polish firms level data.

The described study is the continuation of the previous meta-analyses of the authors (Bialek-Jaworska, Dzik-Walczak, Nehrebecka, 2015). The benefit of this work is that, by aggregating results across a large number of investigations and exploiting between-study design variation, we point variables that modify them more precisely than could be done through qualitative review.

In the publications regarding bank loans, the publication selection bias was found for collateral estimates. When analyzing the determinants of bank loan financing based on the country level data we found that equity is most prevalent among enterprises in Poland, Netherlands and Czech Republic while total debt is most widespread among enterprises in Austria, Portugal, Germany and Italy, where bank loans play a greater role. At the country level collateral is significant for bank loans and the impact that we get is negative. Based on the empirical analysis of Polish firms we conclude that the long-term and short-term debt contracted by non-financial companies is affected by three categories of factors: macroeconomic, microeconomic and structural. We find that the impact of collateral on debt is positive, except for the subsample of large enterprises.

## Bibliography

- [1] Aghion P., Askenazy P., Berman N., Cetto G., Eymard L. (2012), CREDIT CONSTRAINTS AND THE CYCLICALITY OF R&D INVESTMENT: EVIDENCE FROM FRANCE, *Journal of the European Economic Association*, 10(5), pp. 1001–1024.
- [2] Alonso P.D.A., Iturriaga F.J.L., Sanz J.A.R., Vallelado Gonzalez E. (2005), Determinants of Bank Debt in a Continental Financial System: Evidence from Spanish Companies, *The Financial Review*, 40(3), pp. 305-333.
- [3] Ang J., Peterson P. (1984), The Leasing Puzzle, *The Journal of Finance*, 39(4), pp. 1055-1065.
- [4] Atanasova Ch. (2007), Access to Institutional Finance and the Use of Trade Credit, *Financial Management*, pp. 49-67.
- [5] Atanasova C., N. Wilson (2003), Bank Borrowing Constraints and the Demand for Trade Credit: Evidence from Panel Data, *Managerial & Decision Economics*, 24(6/7)
- [6] Beattie V., Goodacre A., Thomson S. (2000), Operating leases and the assessment of lease – debt substitutability, *Journal of Banking and Finance* 24, pp. 427-470.

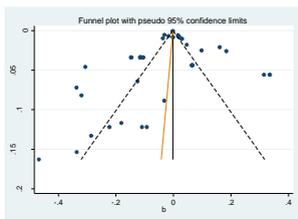
- [7] Beatty A., Liao S., Weber J. (2010), Financial Reporting Quality, Private Information, Monitoring, and the Lease-versus-Buy Decision, *The Accounting Review* American Accounting Association, Vol. 85, No. 4 DOI: 10.2308/accr.2010.85.4.1215, pp. 1215–1238.
- [8] Berger A.N., Cowan A.M., Frame W.S. (2011), The surprising use of credit scoring in small business lending by community banks and the attendant Effects on credit availability, risk, and profitability, *Journal of Financial Services Research* 39, pp. 1-17.
- [9] Bernanke B.S., Gertler M. (1995), Inside the black box: the credit channel of monetary policy transmission (No. w5146), National bureau of economic research.
- [10] Berrospide J., Meisenzahl R., Sullivan B. (2012), Credit Line Use and Availability in the Financial Crisis: The Importance of Hedging, *Finance and Economics Discussion Series*, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington.
- [11] Białek-Jaworska A., Dzik-Walczak A., Nehrebecka N. (2015), Determinanty finansowania działalności przedsiębiorstw kredytem bankowym: meta-analiza, *Bank i Kredyt*, 46 (3), pp. 253 – 298.
- [12] Białek-Jaworska A., Dzik-Walczak A., Nehrebecka N. (2015), Transakcyjne i finansowe motywy wykorzystania kredytu handlowego: meta-analiza, *Wiadomości Statystyczne*, 7.
- [13] Białek-Jaworska A., Dzik-Walczak A., Nehrebecka N. (2015), Kiedy firmy sięgają po leasing?, *Gospodarka Narodowa*, 2
- [14] Blasio G. (2005), Does Trade Credit Substitute Bank Credit? Evidence from Firm-level Data, *Economic notes*, 34(1), pp. 85-112.
- [15] Boguszewski P., Kocięcki A. (2000), Wpływ polityki pieniężnej na zachowania przedsiębiorstw w świetle danych GUS i badań ankietowych - wybrane zagadnienia, *Bank i Kredyt*.
- [16] Boot A., Thakor A., Udell G. (1991), Secured lending and default risk: equilibrium analysis and policy implications and empirical results, *Economic Journal* 101, pp. 458-472.
- [17] Bougheas S., Mateut S., Mizen P. (2009), Corporate trade credit and inventories: New evidence of a trade-off from accounts payable and receivable, *Journal of Banking and Finance* 33, pp. 300-307.
- [18] Bougheas S., Mizen P., Yalcin C. (2006), Access to external finance: theory and evidence on the impact of firm-specific characteristics, *Journal of Banking and Finance* 30 (1), pp. 199–227.
- [19] Branson B.C. (1995), An empirical reexamination of the leasing puzzle, *Quarterly Journal of Business and Economics*, 34(3).
- [20] Brown M., Kirschenmann K., Ongena S. (2010), Foreign Currency Loans - Demand or Supply Driven? *Swiss National Bank*, 2011/2.
- [21] Brown M., Ongena S., Popov A., Yesin P. (2011), Who needs credit and who gets credit in Eastern Europe?, *Economic Policy*, 26 (65): 93-130 DOI: <http://dx.doi.org/10.1111/j.1468-0327.2010.00259.x>
- [22] Callimaci A., Fortin A., Landry S. (2011), Determinants of leasing propensity in Canadian listed companies, *International Journal of Managerial Finance*, 7(3).
- [23] Carbo-Valverde S., Degryse H., Rodriguez-Fernandez F. (2011), Lending Relationships and Credit Rationing: The Impact of Securitization, *Australasian Finance and Banking Conference*.
- [24] Chigurupati V.R., Hegde Sh.P. (2009), Capital market frictions, Leasing and Investment. Working Paper.
- [25] Chu L., Mathieu R., Zhang P. (2008), Why Firms Lease Short-Lived Assets: A Tax-Based Explanation, *Canadian Tax Journal*.
- [26] Cole R.A. (2011), Bank Credit, Trade Credit or No Credit: Evidence from the Surveys of Small Business Finances, Office of Advocacy, U.S. Small Business Administration.
- [27] Cole R.A., Sokolyk T. (2016), Who needs credit and who gets credit? Evidence from the Surveys of Small Business Finances, *Journal of Financial Stability*, in Press, Accepted Manuscript
- [28] Cole R.A., Dietrich A. (2012), SME Credit Availability Around the World, Evidence from World Bank's Enterprise Survey, Paper presented at the 2012 FMA European Conference in Istanbul, Turkey held June 7-8, 2012. Available at: <http://ssrn.com/abstract=2043624>
- [29] Cook D.L. (1999), Trade Credit and Bank Finance: Financing Small Firms in Russia, *Journal of Business Venturing*, Vol.14.
- [30] Coulibaly B., Saprizza H., Zlate A. (2013), Financial Frictions, Trade Credit, and the 2008-09 Global Financial Crisis, Board of Governors of the Federal Reserve System, *International Review of Economics and Finance* 26, pp. 25-38.

- [31] Couppey-Soubeyran J., Hericourt J. (2011), The relationship between trade credit, bank credit and financial structure: from firm-level non-linearities to financial development heterogeneity. A study on MENA firm-level data, Documents de travail du Centre d'Economie de la Sorbonne.
- [32] Danielson M.G., Scott J.A. (2004), Bank Loan Availability and Trade Credit Demand, *The Financial Review* 39(4), pp. 579-600.
- [33] Deloof M., Lagaert I., Verschueren I. (2007), Leases and debt: complements or substitutes? evidence from Belgian SMEs, *Journal of Small Business Management*, Volume: 45 Issue 4, pp. 491-500.
- [34] Demiroglu, C., James, C., Kizilaslan, A. (2012), Bank lending standards and access to lines of credit, *Journal of Money, Credit and Banking*, 44(6), pp. 1063-1089.
- [35] Detragiache E. (1994), Public versus private borrowing: a theory with implications for bankruptcy reform, *Journal of Financial Intermediation* 3, pp. 327-354.
- [36] Detragiache E., Tressel T., Gupta (2008), Foreign Banks in Poor Countries: Theory and Evidence, *Journal of Finance*, American Finance Association, 63(5), pp. 2123-2160.
- [37] Dewaelheyns N., Van Hulle C. (2010), Internal capital markets and capital structure: Bank versus internal debt, *European Financial Management*, Vol. 16, Issue 3, pp. 345-373.
- [38] Doucouliagos C. H., Stanley T. D. (2009), Publication selection bias in minimum-wage research? A meta-regression analysis, *British Journal of Industrial Relations* 47(2), pp/ 406-428.
- [39] Duke J., Franz D., Herbert H, Toy D. (2002), Firm-specific determinants of off-balance sheet leasing: A test of the Smith/Wakeman model, *Journal of Business and Management*, 8(4), pp. 335.
- [40] Egger M., Smith G.D., Schneider M., Minder C. (1997), Bias in meta-analysis detected by a simple, graphical test, *Bmj*, 315(7109), pp. 629-634.
- [41] Eisfeldt A.L., Rampini A.A. (2009), Leasing, Ability to Repossess, and Debt Capacity, *Review of Financial Studies*, 22 (4): 1621-1657. doi: 10.1093/rfs/hhn026.
- [42] Filareto-Deghaye M., Severin E. (2007), Determinants of the choice leasing vs bank loan: evidence from the French SME by KACM, *Revista Investigacion Operacional*, 28(2), pp. 120-130.
- [43] Finucane T.J. (1988), Some empirical evidence on the use of financial leases, *The Journal of Financial Research*, XI(4).
- [44] Franzen L.A., Rodgers K.J., Simin T.T. (2009), Capital Structure and the Changing Role of Off-Balance-Sheet Lease Financing, [http://www.frbatlanta.org/filelegacydocs/seminars/seminar\\_simin\\_101609.pdf](http://www.frbatlanta.org/filelegacydocs/seminars/seminar_simin_101609.pdf), 2009
- [45] Garcia-Appendini E., Montoriol-Garriga J. (2011), Firms as Liquidity Providers: Evidence from the 2007-2008 Financial Crisis, *Journal of Financial Economics*, Vol. 109 No. 1
- [46] Ge Y., Qiu J. (2007), Financial development, bank discrimination and trade credit, *Journal of Banking and Finance*, 31(2), pp. 513-530.
- [47] Grinblatt M., Titman S. (1998), *Financial Markets and Corporate Strategy*, Irwin-McGraw-Hill.
- [48] Ghosh S. (2010), Firm Characteristics, Financial Composition and Response to Monetary Policy: Evidence from Indian Data, *Journal of Indian Business Research*, 2(4), pp. 198-215.
- [49] Ghosh S., Sensarma R. (2004), Does monetary policy matter for corporate governance? Firm-level evidence from India, w: M. Hirschey, J. Kose, A. Makhija (ed.), *Corporate Governance*, Advances in Financial Economics, Vol. 9., Emerald Group Publishing Limited, pp. 327-353.
- [50] Goodacre A. (2003), Operating lease finance in the UK retail sector, *The International Review of Retail, Distribution and Consumer Research*, vol. 13, no. 1, pp. 99-125, <http://dx.doi.org/10.1080/0959396032000065373>
- [51] Graham J.R., Lemmon M.L., Schallheim J. S. (1998), Debt, leases, taxes, and the endogeneity of corporate tax status, *The Journal of Finance*, 53(1), pp. 131-162.
- [52] Guariglia A., Mateut S. (2006), Credit channel, trade credit channel, and inventory investment: Evidence from a panel of UK firms, *Journal of Banking and Finance*, 30(10) pp. 2835-2856.
- [53] Haan L., Sterken E. (2000), Capital Structure, Corporate Governance, and Monetary Policy: Firm-Level Evidence for the Euro Area, *De Nederlandsche Bank, Research Memorandum WO&E No. 637/0032*.
- [54] Haan L., Sterken E. (2006), The Impact of Monetary Policy on the Financing Behaviour of Firms in the Euro Area and the UK, *European Journal of Finance*, Vol. 12, No. 5, pp. 401-420.
- [55] Huang H. Shi X., Zhang S. (2011), Counter-cyclical substitution between trade credit and bank credit, *Journal of Banking and Finance*, 35, pp. 1859-1878.

- [56] Hunter J.E., Schmidt F.L. (1990), *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park: CA: Sage.
- [57] Huyghebaert N., Van de Gucht L., Van Hulle C. (2007), The Choice between Bank Debt and Trade Credit in Business Start-ups, *Small Business Economics*, 29(4), pp. 435-452.
- [58] Jimenéz G., Ongena S., Peydró J., Saurina J. (2009), Monetary Policy and Credit Crunch: Identifying Simultaneously the Bank Lending and Balance Sheet Channels, <http://www.eea-esem.com/files/papers/EEA-ESEM/2009/1304/JOPS%20CC%202009-02-12.pdf>
- [59] Jimenéz G., Ongena S., Peydró J., Saurina J. (2012), Credit supply identifying balance-sheet channel with loan applications and grantem loans, *AMERICAN ECONOMIC REVIEW*, VOL. 102, NO. 5, AUGUST 2012 (pp. 2301-26)
- [60] Jimenéz G., Ongena S., Peydró J., Saurina J. (2012), Credit Supply versus Demand: Bank and Firm Balance-Sheet Channels in Good and Crisis Times, *European Banking Center Discussion Paper No. 2012-003*.
- [61] Jimenéz G., Ongena S., Peydró J., Saurina J. (2013), Monetary Policy and Credit Crunch: Identifying Simultaneously the Bank Lending and Balance Sheet Channels, *Bank of Spain mimeo*.
- [62] Koh J., Jang S. (2009), Determinants of using operating lease in the hotel industry, *International Journal of Hospitality Management*, Vol. 28.
- [63] Lasfer M.A., Levis M. (1998), The Determinants of the Leasing Decision of Small and Large Companies, *European Financial Management*, 4(2), pp. 159-184.
- [64] Leeth J.D., Scott J.A. (1989), The incidence of secured debt: evidence from the small business community, *Journal of Financial and Quantitative Analysis*, 24(03), pp. 379-394.
- [65] Lin J.R., Wang Ch.-J., Chou D.-W., Chueh F.-Ch. (2012), Financial constraint and the choice between leasing and debt, *International Review of Economics & Finance*, vol. 27, issue C, pp. 171-182.
- [66] Love M., Peria M. (2014), How Bank Competition Affects Firm's Access to Finance, *World Bank Econ Rev*, doi: 10.1093/wber/lhu003.
- [67] Love I., Preve L.A., Sarria-Allende V. (2007), Trade credit and bank credit: Evidence from recent financial crisis, *Journal of Financial Economics*, 83.
- [68] Marston F., Harris R.S. (1988), Substitutability of leases and debt in corporate capital structures, *Journal of Accounting, Auditing and Finance*, 3(2), pp. 147-164.
- [69] Marzec J., Pawłowska M. (2011), Racjonowanie kredytów a substytucja między kredytem kupieckim i bankowym – badania na przykładzie polskich przedsiębiorstw, *Materiały i Studia NBP, Zeszyt 261*.
- [70] Mateut S., Mizen P., Ziane Y. (2011), No Going Back: The Interactions Between Processed Inventories and Trade Credit, *Centre for Finance and Credit Markets, Working Paper 11/04*.
- [71] Myers S. C., Majluf N. S. (1984), Corporate financing and investment decisions when firms have information that investors do not have, *Journal of financial economics*, 13(2), pp. 187-221.
- [72] Neuberger D., Rätthke-Döppner S. (2013), Leasing by small enterprises, *Applied Financial Economics*, 23(7), pp. 535-549.
- [73] Rauh J. D., Sufi A. (2012), Explaining Corporate Capital Structure: Product Markets, Leases, and Asset Similarity, *Oxford Journals, Arts & Humanities Social Sciences, Review of Finance*, Vol. 16, Issue 1, pp. 115-155
- [74] Robicheaux S.H., Fu X., Ligon J.A. (2008), Lease Financing and Corporate Governance, *Financial Review*, 43(3), pp. 403-437.
- [75] Rosenthal R., Rubin B.D. (1982), Comparing effect sizes in independent studies, *Psychological Bulletin*, 92, pp. 500-504.
- [76] Sauerbrei W., Blettner, M. (2003), Issues of traditional reviews and meta-analyses of observational studies in medical research. *Meta-Analysis New Developments and Applications in Medical and Social Sciences*, Cambridge, MA: Hogrefe and Huber, pp. 78-98.
- [77] Schallheim J., Wells K., Whitby R. (2013), Do Leases Expand Debt Capacity?, *Journal of Corporate Finance*, Volume 23, pp. 368–381.
- [78] Sharpe S.A., Nguyen H.H. (1995), Capital market imperfections and the incentive to lease, *Journal of Financial Economics*, 39(2), pp. 271-294.
- [79] Singh A. (2011), An empirical investigation of the lease-debt relation in the restaurant and retail industry, *International CHRIE Conference-Refereed Track*.

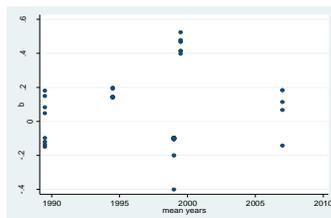
- [80] Singh A. (2013), Is Leasing a Substitute or Complement to Debt? Evidence from the Restaurant and Retail Industry, *Journal of Hospitality & Tourism Research*, 37(2), pp. 155-183.
- [81] Slotty C. (2009), Financial constraints and the decision to lease: Evidence from German SME, *Johann-Wolfgang-Goethe-Universität Frankfurt am Main, Fachbereich Wirtschaftswissenschaften Finance and accounting*, No. 205.
- [82] Stanley T. (2005), Beyond Publication Selection, *Journal of Economic Surveys*, 19, pp. 309-345.
- [83] Stanley T. (2008), Meta-regression methods for detecting and estimating empirical effect in the presence of publication bias. *Oxford Bulletin of Economics and Statistics*, 70, pp. 103-127.
- [84] Stanley, T.D., Doucouliagos, H., Giles, M., Heckemeyer, J. H., Johnston, R. J., Laroche, P., Nelson, J. P., Paldam, M., Poot, J., Pugh, G., Rosenberger, R. S. and Rost, K. (2013), META-ANALYSIS OF ECONOMICS RESEARCH REPORTING GUIDELINES. *JOURNAL OF ECONOMIC SURVEYS*, 27: 390–394. doi:10.1111/joes.12008
- [85] Stanley T.D., Jarrell S.B., Meta-regression analysis: A quantitative method of literature surveys, *Journal of Economic Surveys*, 1989, 3, pp. 161-170.
- [86] Uesugi I., Yamashiro G.M. (2008), The Relationship between Trade Credit and Loans: Evidence from Small Businesses in Japan, *International Journal of Business*, 13(2).
- [87] Yan A. (2006), Leasing and Debt Financing: Substitutes or Complements? *The Journal of Financial and Quantitative Analysis*, 41(03), pp. 709-731.
- [88] Zawadzka D. (2009), Determinanty popytu małych przedsiębiorstw na kredyt handlowy, *Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań*

**Figure 1.** Collateral: relation between the parameter estimation and the inverse of the standard deviation



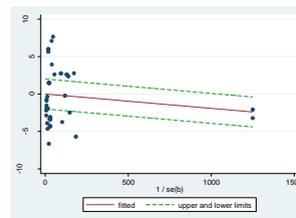
Source: own study based on the review of empirical literature

**Figure 2.** Collateral: change of estimated values in time



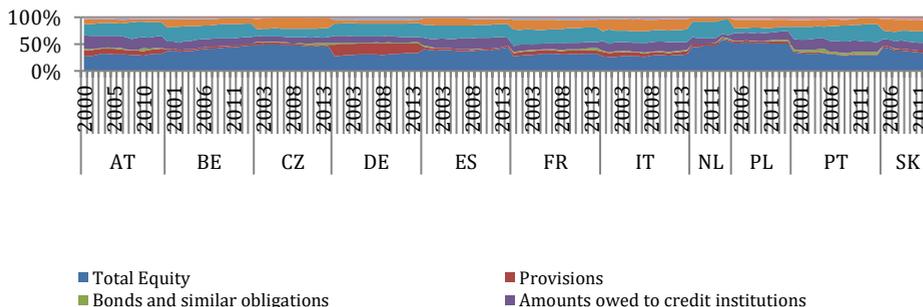
Source: own study based on the review of empirical literature.

**Figure 3.** Galbraith plot for the effect of collateral on bank credit financing



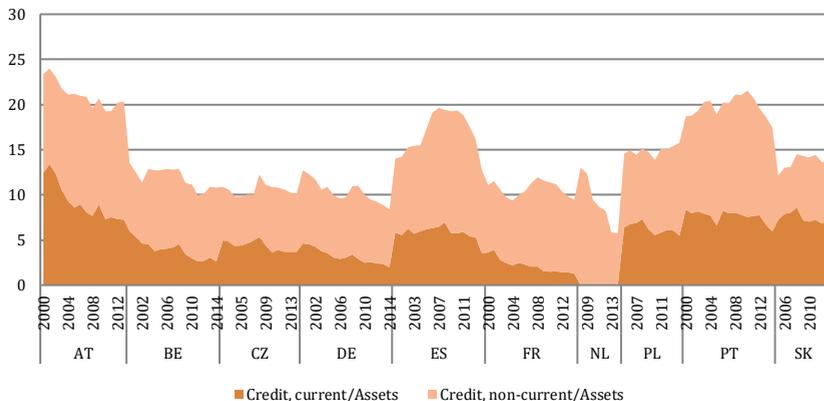
Source: own study based on the review of empirical literature.

**Figure 4.** Weight of each source of financing on total liabilities



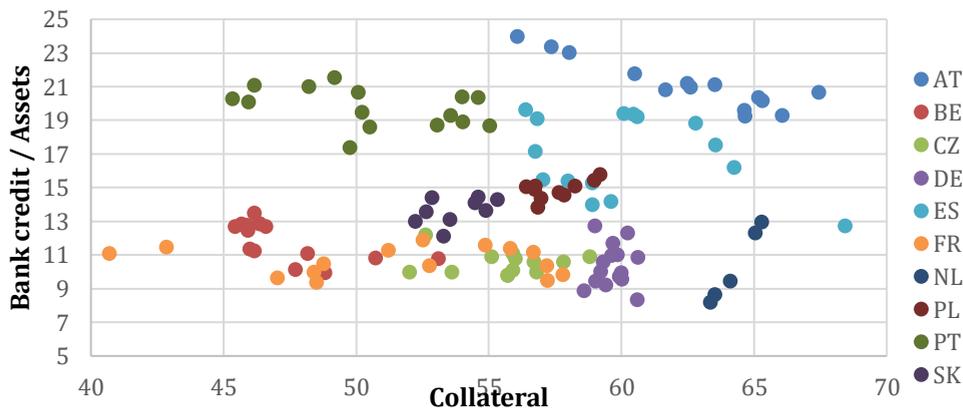
Source: Own Study Based on Bach Database.

Figure 5. Bank credit on total assets



Source: own study based on BACH DATABASE.

Figure 6. Bank credit and Collateral relation



Source: own study based on BACH DATABASE.

Table 1. List of articles included in the last phase of the meta-analysis

Authors and title	Years of research	Country	Publications
Alonso et al. (2005) Determinants of Bank Debt in a Continental Financial System: Evidence from Spanish Companies	1991-1996	Spain	The Financial Review, Eastern Finance Association
Białek, Dzik-Walczak, Nehrebecka (2014)	1995-2011	Poland	Materiały i Studia National Bank of Poland
Boguszewski, Kocięcki (2000) Wpływ polityki pieniężnej na zachowania przedsiębiorstw w świetle danych GUS i badań ankietowych - wybrane zagadnienia	1994	Poland	Bank i Kredyt
Bougheas et al. (2006) Access to external finance: theory and evidence on the impact of firm-specific characteristics	1990-1999	Great Britain	Journal of Banking and Finance

Brown et al. (2011)	2003-2007	Bulgaria	Economic Policy
Berrosipide, Meisenzahl, Sullivan (2012), Credit Line Use and Availability in the Financial Crisis: The Importance of Hedging	2006-2008		FEDS Working Paper
Cole, Sokolyk (2016) Who needs credit and who gets credit? Evidence from the surveys of small business finances.	1993, 1998, 2003	USA	Journal of Financial Stability
Cole., Bank Credit, Trade Credit or No Credit: Evidence from the Surveys of Small Business Finances (January 14, 2011). Available at SSRN: <a href="http://ssrn.com/abstract=1540221">http://ssrn.com/abstract=1540221</a> or <a href="http://dx.doi.org/10.2139/ssrn.1540221">http://dx.doi.org/10.2139/ssrn.1540221</a>	1993, 1998, 2003	USA	Office of Advocacy, U.S. Small Business Administration
Cole, Dietrich (2012) SME Credit Availability Around the World, Evidence from World Bank's Enterprise Survey	2006-2011	80 countries	World Bank's Enterprise Survey
Cook (1999) Trade Credit and Bank Finance: Financing Small Firms in Russia	1995	Russia	Journal of Business Venturing
Demiroglu et al. (2012) Bank lending standards and access to lines of credit	1996-2004		Journal of Monetary, Credit and Banking
Dewaelheyns, Van Hulle (2010) Internal capital markets and capital structure: Bank versus internal debt	1997-2001	Belgium	European Financial Management
Ghosh, Sensarma (2004) Does monetary policy matter for corporate governance? Firm-level evidence from India.	1992-2002	India	Advances in Financial Economics
de Haan, Sterken (2000)	1990-1997	EU, Great Britain	De Nederlandsche Bank, Research Memorandum WO&E
de Haan, Sterken (2006)			European Journal of Finance
Huyghebaert, Van de Gucht, Van Hulle (2007), The Choice between Bank Debt and Trade Credit in Business Start-ups	1988-1991	Belgium	Small Business Economics
Jiménez, Ongena, Peydró, Saurina (2010), Credit supply identifying balance-sheet channel with loan applications and grantem loans.	2002-2008	Spain	European Central Bank Working Paper
Jiménez et al. (2010)	2002-2008	Spain	AMERICAN ECONOMIC REVIEW
Jiménez, Ongena, Peydró, Saurina. (2012) Credit Supply versus Demand: Bank and Firm Balance-Sheet Channels in Good and Crisis Times	2002-2010	Spain	European Banking Center Discussion Paper
Jiménez, Ongena, Peydró., Saurina, (2009), Monetary Policy and Credit Crunch: Identifying Simultaneously the Bank Lending and Balance Sheet Channels	1992-2006	Spain	Bank of Spain mimeo
Love, Peria (2014)	2002-2010	80 countries	World Bank Econ Rev
Aghion, Askenazy, Berman, Cette, Eymard (2012)	1993-2004	France	Journal of the European Economic Association

Source: own study based on the review of empirical literature.

**Table 2.** Summary statistics for the effect of collateral on bank loan financing

Variable	The direction of impact	# regressions	Mean	Median	SE	Minimum	Maximum
Fixed Assets / Total	+	27	0,089	0,139	0,202	-0,401	0,524
	-	15					

Assets	Not significant	12				
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Source: own study based on the review of empirical literature.

**Table 3. Linear regression results for publication selection bias**

Variables	b (se)	
Publication selection bias		
1/se	-0,1139*** (0,0362)	
constant	2,1118*** (0,5891)	
Publication selection bias + heterogeneity		
Model	FE	RE
Publication bias (K-variables)		
Constant	0,7868*** (0,1682)	0,8496*** (0,2086)
No. of firms	-5,44e-06*** (9,90e-07)	-5,63e-06*** (1,07e-06)
Study citations	0,00678** (0,0034)	0,0071*** (0,0033)
Genuine empirical effects (Z-variables)		
1/se	-0,1085*** (0,0096)	
Sector fixed-effects /se	0,1445*** (0,0335)	
N	46	
F (H <sub>0</sub> : K variables are jointly not significant)	F(2, 41) = 17.31 Prob > F = 0.0000	
Test for residual between-study variance (of tau <sup>2</sup> =0)	Q_res (41 df) = 1001.21 Prob > Q_res = 0.0000	

\* Significant at 10%, \*\* Significant at 5%, \*\*\* Significant at 1%. Mean error values are enclosed in round brackets.

Source: own study based on the review of empirical literature.

**Table 4. Potential Explanatory Variables for Meta-Regression Analysis**

Variables	Definition
Data Characteristics	
Panel data	1 if panel data are used (cross-sectional data are the base)
Time span	The number of years of the data used
No. of firms	Sample size/time span
Average year	Average year of the data used
Year of publication	Year when an article was published
Large	1 if large enterprises are investigated
Capital groups	1 if capital groups are investigated
Estimation Characteristics	
Differences	1 if the regression is estimated in differences
Year fixed-effects	1 if year fixed-effects are included
Sector fixed-effects	1 if sector fixed-effects are included

OLS	1 if OLS used for estimations (random effects, GMM, WLS, and others as a base)
Macro	1 if macroeconomic conditions variables are included
One-step estimations	1 if coefficients are estimated in one-step
Specification Characteristics	
Firm size	1 if the specification controls for firm size (sector competition)
One country	1 if one country firms are included in the regression
Lagged spillover	1 if the coefficient represents lagged foreign presence
Europe	1 if European countries are investigated
Publication Characteristics	
Publication date	The publication year of the study
Published	1 if the study was published in a peer-reviewed journal
Study citations	Study citations in Google Scholar per age of the study, as of May 2016
Journal rank	1 if the study published in high journal rank, 2013 ISI impact factor
Working paper	1 if research is a working paper

Source: own study based on the review of empirical literature.

**Table 5.** Country data level analysis of bank loans

Variable	Whole sample		Small firms		Medium firms		Large firms	
	RE	GLS	RE	GLS	RE	GLS	RE	GLS
Collateral (Fixed Assets / Total Assets)	-0,187 (0,035) [-5,3]	-0,124 (0,038) [-3,3]	-0,041 (0,069) [-0,6]	-0,170 (0,057) [-3,0]	-0,269 (0,063) [-4,3]	-0,180 (0,054) [-3,4]	0,014 (0,053) [0,3]	-0,045 (0,042) [-1,1]
Profitability (ROA = Net Income / Total Assets)	-0,489 (0,130) [-3,8]	-0,225 (0,095) [-2,4]	0,122 (0,300) [0,4]	-0,085 (0,234) [-0,4]	-0,429 (0,242) [-1,8]	0,067 (0,192) [0,4]	-0,181 (0,163) [-1,1]	0,038 (0,131) [0,3]
Interests on financial debts/ Total Assets	0,743 (0,421) [1,8]	1,325 (0,370) [3,6]	1,844 (0,638) [2,9]	1,423 (0,441) [3,2]	-0,176 (0,654) [-0,3]	0,052 (0,496) [0,1]	0,696 (0,585) [1,2]	2,237 (0,486) [4,6]
Size (Logarithm of Total Assets)	-0,553 (0,336) [-1,7]	-0,961 (0,366) [-2,6]	-1,386 (0,589) [-2,4]	-3,121 (0,633) [-4,9]	1,522 (0,618) [2,5]	0,263 (0,683) [0,4]	-1,177 (0,486) [-2,4]	-0,651 (0,520) [-1,3]
Constant	37,341 (7,054) [5,3]	39,089 (7,893) [5,0]	45,209 (12,014) [3,8]	84,714 (12,890) [6,6]	6,552 (10,833) [0,6]	22,717 (12,577) [1,8]	33,412 (9,923) [3,4]	23,450 (10,193) [2,3]

N	143							
Diagnostic	Statistical tests	p-value	Statistical tests	p-value	Statistical tests	p-value	Statistical tests	p-value
Test for panel-level heteroskedasticity	151.33	0.0000	158.15	0.0000	2.13	0.9952	-84.94	1.0000
Test for panel-level autocorrelation	29.476	0.0003	13.669	0.0041	52.296	0.0000	-0.034	0.9731
Test of cross sectional independence	1.816	0.0694	0.802	0.4225	0.666	0.5057	8.147	0.0171

Mean error values are enclosed in round brackets, t Student – in square brackets.

Source: own study based on BACH DATABASE.

**Table 6.** Description of variables used in the debt of polish enterprises model

Variable	Definition
Debt1	(Long-term debt+ Short-term debt) / Total assets
Debt2	Short-term debt / Total assets
Debt 3	(Long-term debt+ Short-term debt) / (Total debt+Equity-Revaluation reserve)
Firms' characteristics	
Company size	Logarithm of revenues
Profitability	EBIT/ total assets
Collateral	Tangible assets/total assets
Non-interest tax shield	Depreciation/total assets
Interest tax shield	Interest/total assets
Intangible assets	Intangible assets /total assets
Growth opportunities	(Revenue from sales (t) – Revenue from sales (t-1)) / Revenue from sales (t-1);
Current ratio measure	Current assets/Short-term liabilities
Quick ratio measure	Current assets and inventories/Short-term liabilities
Effective tax rate	The current part of income tax/profit before tax
Inverted index bankruptcy	Nehrebecka, Dzik (2016)
Grants	Binary variable, takes 1 if firm got grants
IAS	Binary variable, takes 1 if firm have set of basic accounting records which are prepared and audited in line with IAS
Macroeconomic variables	
GDP	The growth of Gross Domestic Product
WIBOR3M	3-month WIBOR interest rate
REER	Effective rate of exchange

**Table 7.** Descriptive statistics of variables used in the model

Variable	Mean	Std. dev	Q1	Median	Q3	Min	Max
Debt	0,3928	0,2137	0,2240	0,3814	0,5493	0,0000	0,9821
Revenues	536923	2769538	22256	79039	255306	0,0000	79000000
Profitability	0,0691	0,0846	0,0015	0,0465	0,0965	0,0000	0,7770
Collateral	0,2661	0,2218	0,0729	0,2224	0,4102	0,0000	0,9673
Non-interest tax shield	0,0363	0,0334	0,0136	0,0294	0,0489	0,0000	0,4537
Interest tax shield	0,0066	0,0105	0,0000	0,0000	0,0101	0,0000	0,0354
Intangible assets	0,0312	0,0796	0,0008	0,0048	0,0198	0,0000	0,8654
Growth opportunities	0,1630	0,3772	-0,0537	0,0942	0,2989	-0,4331	1,1907

Current ratio measure	2,2986	1,9178	1,1179	1,5883	2,6870	0,5611	8,3258
Effective tax rate	0,0669	0,1103	0,0000	0,0000	0,1480	0,0000	0,3420
Inverted index bankruptcy	1,0447	2,2484	0,3887	1,0000	1,8662	-4,6108	6,1899
Median sector debt	0,3737	0,0949	0,3089	0,3552	0,4397	0,2477	0,6204

**Table 8.** Debt determinants – model estimation results.

Explanatory variable	Trade-off theory	Pecking order theory	Models with effect of the sector			Models with effect of the size		Robust models	
			Base model (Debt 1)	Manufacturing	Services	Small	Large	Debt 2	Debt 3
Debt in t-1			0,584 * 5 (0,00 21)	* 0,641 * 7 (0,00 87)	* 0,590 * 0 (0,00 40)	* 0,554 * 5 (0,00 57)	* 0,764 * 6 (0,00 63)	* 0,42 * 36 (0,00 28)	* 0,58 * 55 (0,00 35)
Firms' characteristics:									
Company size	+	-	0,007 * 1 (0,00 03)	* 0,012 * 2 (0,00 05)	* 0,006 * 3 (0,00 04)	* 0,004 * 1 (0,00 07)	* 0,013 * 5 (0,00 17)	* 0,01 * 04 (0,00 02)	* 0,00 * 81 (0,00 04)
Profitability	+/-	-	- * 0,116 * 9 (0,00 76)	* - * 0,121 * 9 (0,01 84)	* - * 0,174 * 7 (0,01 09)	* - * 0,044 * 5 (0,01 78)	* - * 0,277 * 7 (0,01 23)	* - * 0,08 * 87 (0,00 81)	* - * 0,13 * 83 (0,00 70)
Collateral	+	-	0,114 * 1 (0,00 44)	* 0,073 * 6 (0,01 10)	* 0,086 * 9 (0,00 47)	* 0,062 * 0 (0,00 87)	* - * 0,032 * 3 (0,00 99)	* 0,02 * 77 (0,00 39)	* 0,09 * 71 (0,00 42)
Non-interest tax shield	-		- * 0,325 * 2 (0,02 05)	* - * 0,391 * 1 (0,07 40)	* - * 0,195 * 0 (0,01 67)	* - * 0,160 * 5 (0,04 32)	* 0,006 * 8 (0,04 52)	* - * 0,11 * 45 (0,01 80)	* - * 0,25 * 87 (0,02 09)
Interest tax shield			1,930 * 4 (0,03 22)	* 2,392 * 2 (0,08 62)	* 1,666 * 5 (0,05 75)	* 1,695 * 5 (0,10 44)	* 1,650 * 7 (0,06 80)	* 2,65 * 85 (0,04 17)	* 1,46 * 53 (0,03 83)
Intangible assets			0,216 * 9 (0,01 11)	* - * 0,087 * 1 (0,04 07)	* 0,068 * 2 (0,01 42)	* 0,221 * 9 (0,02 34)	* - * 0,087 * 2 (0,03 24)	* 0,20 * 24 (0,01 14)	* 0,16 * 07 (0,01 03)
Growth opportunities	-	+	0,035 * 8 (0,00 15)	* - * 0,012 * 4 (0,00 55)	* 0,076 * 0 (0,00 21)	* 0,019 * 7 (0,00 27)	* - * 0,011 * 9 (0,00 68)	* 0,08 * 27 (0,00 14)	* 0,04 * 81 (0,00 12)
Current ratio measure	+	-	0,002 * 9 (0,00 02)	* 0,005 * 2 (0,00 06)	* 0,005 * 5 (0,00 03)	* 0,003 * 1 (0,00 06)	* 0,015 * 6 (0,00 11)	* - * 0,00 * 08 (0,00 04)	* 0,00 * 25 (0,00 04)



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Test	-	-	-	-	-	-	-
	9,141	6,025	6,134	6,228	7,172	9,63	8,65
	4	2	4	5	8	54	73
	(0,00	(0,00	(0,00	(0,00	(0,00	(0,00	(0,00
	00)	00)	00)	00)	00)	00)	00)
Arellano-		0,262	1,460	1,352	0,343	0,56	1,19
Bond Test	1,247	8	5	0	6	65	04
for the	1	(0,79	(0,14	(0,17	(0,73	(0,57	(0,23
first-order	(0,21	27)	42)	64)	12)	11)	39)
autocorrel	24)						
ation							
Arellano-		157,3	187,2	179,3	197,2	341,	344,
Bond Test		900	700	050	016	88	51
for the	344,2	(0,98	(0,64	(0,78	(0,44	(0,61	(0,57
second-	584	04)	16)	32)	24)	17)	27)
order	(0,57						
autocorrel	65)						
ation							

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## The Concept of Moderation within the Context of Leadership in Malaysia

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### Abstract

Leadership is an important aspect in a country's development and shaping of its society. The advancement of a nation is dependent on its leadership. With that in mind, this article aims to shed light on the concept of moderation from the perspective of the leadership of Malaysia's Prime Ministers. The main focus of this study is the concept of moderation utilised by Dato' Seri Mohd Najib Tun Razak's leadership through aspects such as politics, economy and social. The methodology used in this study is document analysis and historical research, which enabled us to obtain complete data. The results of this study show that the concept of moderation does indeed exist in his leadership, in his quest to bring the nation on par with other developed countries.

**Keywords:** *moderation, leadership, Malaysia, Prime Ministers*

### Introduction

The ultimate mandate of a leader is to provide an environment conducive for his people in a fair and just manner, preventing any untoward circumstances so that the nation and its people will remain in a state of well-being. Malaysia is a multi-racial country with over 200 ethnicities; with Malays, Chinese and Indians being the majority of the country's population (Abdul Rahman, 2010). With that said, each leader has his own way of propelling the country towards achievements on the political, economic, social, education and safety front; and this indirectly harmonizes racial relations through the concept of moderation. This is down to the fact that the concept of moderation is responsible for providing balance in all aspects of human life and can be implemented in activities of daily living for the betterment of the nation's development.

Good leadership is one which is thorough and intelligent in carrying out responsibilities especially with regards to racial sensitivities. Otherwise, disunity will occur and tarnish the nation's reputation. Leadership and management responsibilities at the individual, family, society and national level are all borne by the leaders. The success and advancement of a nation relies heavily on its leadership style (Abd Ghani, 2011). Successful leadership has the ability to influence an individual's behaviour; with the purpose of giving out orders, providing guidance, and maintaining the strength and unity of an organization with solid competency.

### Definition of Leadership

Leadership is a vital aspect in the development of a nation and is given great value, both by the Islamic and Western communities alike. Muslim scholars agree that leadership is one of the pillars of religion. A task is deemed as incomplete without the presence of leadership (Hamzah, 2010). So much so, that the Prophet Muhammad PBUH has urged that a leader be appointed even in a group of few persons, as evident in his Hadith: *When three persons set out on a journey, they should appoint one of them as their leader*. Apart from that, Islam also lays out a leadership hierarchy and mandate as follows:

*Surely! Every one of you is a guardian and is responsible for his charges: The Imam (ruler) of the people is a guardian and is responsible for his subjects; a man is the guardian of his family (household) and is responsible for his subjects; a woman is the guardian of her husband's home and of his children and is responsible for them; and the slave of a man is a guardian of his master's property and is responsible for it. Surely, every one of you is a guardian and responsible for his charges.*

In Islam, leadership is a mandate given to an individual to manage a group or an organization (Haddara & Enanny, 2009). A leader neglecting that responsibility will ultimately have a negative impact towards the governing of his nation. With that being said, leadership is not something special that should be fought over because it is in its essence, a mandate. The Prophet Muhammad PBUH once reminded Abu Dhar al-Ghifari (whom had asked for a position of leadership), which translates to:

*Abu Dhar, thou art weak and authority is a trust. And on the Day of Judgment it is a cause of humiliation and repentance except for one who fulfils its obligations and (properly) discharges the duties attendant thereon* (Muhamat, 2010).

Leadership is not something to take lightly because it involves an enormous responsibility put by the people on an individual's shoulder to govern the country towards becoming a developed Muslim nation. Islam outlines 5 major responsibilities in leadership which are: upholding Islamic principles, protecting the *Karamat al-Insan* (human dignity), prospering the earth, upholding justice and *Islah* (reform) which is essentially the improvement of society via appropriate means.

According to *Kamus Dewan* (the official Malaysian authorized dictionary for the Malay language), the meaning behind leadership is *the ability to lead*, where the term 'lead' is synonymous with 'guide', 'direct', and 'propel'. Meanwhile, the term 'leading' is synonymous with 'guiding', 'captaining', 'heading' and 'propelling' (Baharom, 2007).

On the other hand, the Western world defines leadership as the process by which an individual influences a group of people to achieve a common objective (Northouse, 2011). There are a number of scholars whom shed light on the meaning of leadership, including Charles Handy. He defines leadership as having vision and mission, and awards points for the tasks accomplished (Karimi, 2007). Furthermore, quoting Joanne Ciulla (2004), leadership is not actually a person or a position, but rather a complex moral relationship amongst humans based on shared trust, commitment, emotions and vision.

Leadership can be further defined as follows:

The effort of influencing an individual or a group of individuals to complete a task in order to achieve a certain objective.

An individual's behaviour when he is instructing a group activity towards a common aim.

The art of forming relationships between individuals with multiple groups of people which directs them towards a planned objective.

An effective and influential leadership style (al-Qiyadah al-Mu'assirah) is shown through its leader's actions. Its effect and influence is not prominent through debates and discussions, but rather through the behaviour and attitude of the leader themselves. The end result is an accomplished endeavour which leads to productivity that is worthwhile.

### **The Concept of Moderation in Each of the Nation's Leaders' Approach**

The advancement of a nation is dependent on the leadership style of its head of state. Only the best policies and agendas are handpicked by the leaders to allow the country to continue prospering without conflict. The best approach is utilized to ensure that the citizens' rights are protected, in accordance with evolving circumstances. Such is the approach taken by the first Prime Minister of Malaysia, Tunku Abdul Rahman Putera Al-Haj, to realize the dream of turning Malaysia into a developed nation that is able to keep up with the times. The affectionate nickname 'Father of Independence' is more than relevant considering the undertaking that he spearheaded which earned Malaysia's freedom as an independent and sovereign nation. The talks which he participated in spared any bloodshed. Truce was achieved with the British, and Malaysia gained its independence on 31<sup>st</sup> August 1957. As the Prime Minister, his hope for the people in preserving of the nation's independence is captivated as follows:

*All people must feel that there is room for them in our country and that we can all live in peace with one another, provided of course that we respect one another's rights, and provided, too, that we realize we owe duties to one another for the good and well-being, the progress and happiness of our country, Malaysia.*

That speech given by him shows how much he valued peace and harmony. He urged the Malaysian people to always work together and help each other despite contrasting backgrounds. Furthermore, he emphasized tolerance and respect to encourage harmony within a multi-ethnic community (Abdul Rahman, 2010). Racial relations became the core of all his future undertakings where the nation's growth and development were concerned.

After achieving independence on 31<sup>st</sup> August 1957, racial unity was stronger than ever. Needless to say, it is evident that Tunku Abdul Rahman, the nation's highest ranking leader at the time, played a key role in terms of racial unity. This is echoed by Tan Cheng Lock whom commended Tunku as being 'a leader of the people' despite his royal heritage. As the nation's leader, Tunku realized that independence could only be achieved through cooperation between all the races in Malaysia. Hence, he formed a political party known as the Alliance Party which comprised UMNO, MIC and MCA. The alliance of these 3 political parties convinced the British to end its colonization of the Malayan Union. This early racial unity initiated by Tunku became the basis for future post-independence racial relations in Malaysia. This would later on become the core of the leadership of his predecessors (Hussin, 2009).

The tenure of the second Prime Minister, Tun Abdul Razak Hussein who was in office from 1970 until 1976, brought forth many developments for the nation, especially with regards to education. <sup>1</sup> He was a leader willing to serve the people and his nation with a lifetime of servitude. This was evident in his life principle to 'serve the people and country at all times.' From those words alone we can conclude that he was a leader who always put the people first, and his decisions always took into account their interests without jeopardizing their rights.

In the years leading up to independence, a consensus arose amongst all the nation's leaders that a comprehensive national education system was necessary to fulfil the needs of the country. Thus, the National Education Policy was born through the 1956 Razak Report and was made a part of the 1957 Education Ordinance. <sup>2</sup> Then, a committee was appointed to study the policy to ensure that it was adequate enough to nurture a united and disciplined people; so that skilled manpower would be available to enhance the nation's development. It was also a means of inculcating national unity and integration (Abdullah, 2008).

Apart from prioritizing education, Tun Abdul Razak also put great emphasis on racial relations due to the nature of the nation's demographics. To maintain harmony and peace within the country, especially after the May 13<sup>th</sup> 1969 incident,<sup>3</sup> he took drastic action such as suspending Parliament, declaring a state of emergency and founding MAGERAN to govern the nation on a temporary basis. He also introduced policies which strengthened ethnic relations such as the New Economic Policy, the mandatory use of Bahasa Malaysia in the education system and the National Principles (Rukun Negara), among others. All those policies had one common goal: to protect the racial sensitivities of the citizens so that such an incident will not repeat itself.

After Tun Abdul Razak's term in office ended, he was replaced by Tun Hussein Onn. <sup>4</sup> He was a strict but fair leader, and continued to implement Tun Abdul Razak's policies starting from 1976. He was also the brainchild of a number of important

<sup>1</sup> He was a nationalist, political leader, elite member of the Malay community and a diplomat whom embodied the Malay spirit. Throughout his 7 years governing Malaysia, many efforts were done for the prosperity of the people. Among the aspects that he emphasized include stabilizing the economy by introducing the New Economic Policy. Hence, he is referred to as 'The Father of Development' for the many changes which he brought upon the nation for the sake of its advancement. See Faridah Jaafar, 2007, *Perdana Menteri dan Dasar Luar Malaysia 1957-2005 (Prime Ministers and Malaysia's Foreign Policies 1957-2005)*, Kuala Lumpur, Penerbit Universiti Malaya, p.55.

<sup>2</sup> The objective of the National Education Policy is to fulfil the nation's needs and encourage the growth of culture, social, the economy and politics. See Zabri Zakaria, 2010, *Peralihan Dasar Perdana Menteri (Transition of the Prime Minister's Policies)*, Kajang, Time Edition, p.4.

<sup>3</sup> On the ill-fated date of May 13, 1969, a tragic event took place, considered as a dark cloud over the nation's history. The racial conflict that broke out led to the loss of lives and property. It was associated with the 1969 General Election and was the peak of racial disunity in Malaysia. During that year's elections, many sensitive issues were brought up such as the national language, the special rights of the Malays and citizenship of the non-Malays. In the 1969 General Election, the Alliance Party failed to gain a two-thirds majority in the House of Representatives, while DAP and the Malaysian People's Movement Party (Parti Gerakan), whom had won 25 seats, held a demonstration in the streets of Kuala Lumpur which insulted the Malays. This offended the Malays deeply, and UMNO retaliated by holding a demonstration of their own to oppose the insulting actions of DAP and Gerakan. In those tense and emotional moments, the incident of May 13, 1969 took place; a breaking point for the years of suppressed conflict dating back even before 1969. See Abdullah Md. Zin & Khairil Annas Jusoh, 2012, *Pendekatan Wasatiyyah dalam Menghayati 1Malaysia (A Wasatiyyah Approach in Embracing 1Malaysia)*, Kuala Lumpur, Kasturi Jingga Sdn. Bhd., p.19; Mohd Fitri Abd Rahman & Mohd Foad Sakdan, 2013, *Konflik Politik Perkauman: Strategi dan Penyelesaian Cara Malaysia (The Conflict of Racial Politics: Malaysia's Strategy and Solution)*, Kuala Lumpur, Dewan Bahasa dan Pustaka, p.53.

<sup>4</sup> Tun Hussein Onn was known for his emphasis on unity. He also gave a lot of importance towards respecting the law. Starting out as a practitioner of law, he then switched to politics. As the Prime Minister, he protected the people's interests especially in combating bribery to ensure that the nation's legislature and development are accounted for. See Hamidin Abd. Hamid, 2006, *Tun Hussein Onn: Bapa Perpaduan (Tun Hussein Onn: Father of Unity)*, Kuala Lumpur, Arkib Negara Malaysia, pp.138-139.

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changes that helped shape the nation's development and protected the people's interests. In a speech he said, *I am not necessarily an important person for the country, but what is important is what I do for the country*. This clearly proves how highly he values the people and country which he serves, and he always took into consideration the input of others before finalizing a decision.

Among the many efforts undertaken by Tun Hussein Onn is instilling among the people the mentality of being thrifty with their spending and saving money. He knew that this would certainly be the backbone of the country's economy via the New Economic Policy. Production of raw material such as palm oil, rubber, timber, tin ore and petroleum increased dramatically. The Third Malaysia Plan (*Rancangan Malaysia Ketiga*) gave much emphasis on agriculture and industrialization, aside from using education as the propelling force for the nation's advancement. Like the Prime Ministers before him, Tun Hussein Onn also gave utmost importance to the rights of each race in Malaysia. In other words, national unity is vital for the country's future aspirations to transpire. Bearing that in mind, the Board of National Unity founded in 1974 was revamped and refocused to create a united, fair and progressive community in line with the National Principles. He also gave a lot of attention to the concept of *Rukun Tetangga* (literal translation: Neighbourhood Association), which he believed could close the gap between citizens of different backgrounds and religion.

He also made Bahasa Melayu the official language, a move which was said to be the stepping stone towards the formation of the nation. He believed that language could be used as a tool to unite rather than divide. Aside from implementing domestic policies, he did not neglect to set in motion many plans to strengthen international bonds. Being at the helm of leadership, he continued the Non-Aligned Policy in the context of Malaysia's Foreign Affairs; and he always emphasized the Principle of Common Peace (*Prinsip Keamanan Bersama*), which is essentially to respect the rights and sovereignty of a state, being non-aggressive, not meddling with the affairs of a state, achieving common benefit and common peace (Abd. Hamid, 2006).

Tun Hussein Onn's steadfast approach can be clearly seen through his efforts to ensure inter-ethnic unity, political stability and the everlasting of the nation. It is only fitting that he was given the affectionate nickname of "Father of Unity" due to his strong emphasis on the spirit of nationalism.

After Tun Hussein Onn's time in office for almost 6 years, the nation's leadership was then continued by Tun Dr. Mahathir Mohamad whom held his position for an unprecedented 22 years as the fourth Prime Minister of Malaysia. <sup>1</sup> Under his tutelage, Malaysia progressed towards an era of being a developed nation. Tun Dr. Mahathir was known as the "Father of Modernization" because ever since the beginning of his term in office, he propelled the nation towards achieving the status of a developed nation. Many efforts were taken to bring Malaysia on par with other developed nations. In terms of economic growth, he introduced a clear paradigm shift which transformed Malaysia from an agriculture-based nation to an industrialized nation with global trading power. According to this new policy, each state was instructed to initiate industrial programs by providing sites for light and medium industries, finding external investors and upgrading the infrastructure. This environment made it possible to develop those areas and provide many jobs for the local and international workforce.

Among the many accomplishments of this innovation magnate is founding the nation's very own car manufacturer, Proton. As of today, Malaysia is capable of creating new car models via collaboration with the Japanese. The introduction of the Multimedia Super Corridor emphasized IT as an asset for the people that ensured the future-proofing of the nation. The construction of Putrajaya, the Petronas Twin Towers and others is proof of his commitment towards the development of the nation and its people. The incremental use of technology directly improved the nation's income generation capacity.

As a developed nation, Tun Mahathir Mohamad planned an agenda to transform Malaysia into a fully industrialized nation by introducing Vision 2020. <sup>2</sup> Vision 2020 not only covers the aspect of economy but also politics, social, spiritual,

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<sup>1</sup> He became the fourth Prime Minister of Malaysia on July 18, 1981. A prominent political figure, nationalist and international leader; known for his intuitive ideas, controversy and strict principles. During his leadership, Malaysia was heralded as a rising power in international politics trying to advance with a global-based industrialized economy, as well as knowledge of science and technology. See Ramlah Adam, 2004, *Pemikiran Tun Dr. Mahathir Mohamad (The Mind of Tun Dr. Mahathir Mohamad)*, Malacca, Institut Kajian Sejarah dan Patriotisme Graha (*Graha Institute of Historical Study and Patriotism*), IKSEP, p.17.

<sup>2</sup> The nine objectives of Vision 2020 are: to create a united people; to create a people whom are free, devoted to their nation, believe in themselves and admired by others; to form a mature democratic society; to construct a society which can be modelled after in terms of ethics and attitude; to create an advanced and scientific society; to create a loving society; to create a society whom are economically fair;

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psychology and national unity. It aims to create peace, protect racial pride and prevent oppression. Within Vision 2020, he outlined nine main objectives that have to be constantly achieved without fail.

Being tasked with spearheading a multi-ethnic society, Tun Dr. Mahathir was very adept in matters concerning unity. He was quite worried with the racial divide that was occurring where the people would only stick with their own kind and would think lowly of others from a different group. Thus, he encouraged the abolishment of these ethnic groups by organizing public events that gave a chance for the people to mingle and interact. He saw that the situation was still under control and was in good shape.

This effort to cultivate racial unity was continued by Tun Abdullah Ahmad Badawi.<sup>1</sup> Since the beginning of his leadership, he emphasized the importance of ethnic relations and made it a national agenda with the belief that good ethnic relations would serve as a strong foundation for the nation's development. He made evaluations based on the concept of moderation. He believed that being moderate and respecting others would go a long way towards solving any problem (Anon, 2009). He called upon all parties to play their part in bringing life to the spirit of nationalism in order for all conflicts to be resolved and the development to be achieved.

Apart from focusing on the aspect of unity, he also gave emphasis on economy-related issues. The national mission under the Ninth Malaysia Plan (Rancangan Malaysia Kesembilan) shows the attention he gave towards improving the citizens' quality of life in the midst of domestic and foreign competition. In one of his speeches he said:

*The institutes of Wakaf (religious endowment) and Zakat (Payment made annually under Islamic law on certain kinds of property and belongings and used for charitable and religious purposes) should work hand in hand as a vital mechanism to ensure the prosperity of Muslims, especially to release them from poverty.*

Despite prioritizing Muslims, he did not neglect the rights of the other races such as the Chinese, Indians and others who dwell in this country. Fairness and justice is the core of the responsibility held by a nation's leader.

Another transformational agenda brought forth by Tun Abdullah Ahmad Badawi is "Islam Hadhari" which aims to convince the Malaysian people that Islam should be the epicenter of future undertakings to ensure the nation's success. It was also used as an approach to repair the stigma that the global community had towards Muslims post-September 11, 2001 (Pandian, 2007). The stereotype of Islam being violent and inhumane was successfully abolished through debates and talks which allowed the Western world to familiarize themselves with Islam on a deeper level. This undertaking certainly proves that he was a man of moderation in carrying out his role as the nation's leader, despite holding the post for only three years.

After Tun Abdullah Ahmad Badawi resigned in April 2009, Malaysia was then spearheaded by Dato' Seri Mohd Najib Tun Abdul Razak. He introduced the 1Malaysia Concept (*Gagasan 1Malaysia*). This concept is actually a continuation from his two previous predecessors, Tun Dr. Mahathir Mohamad and Tun Abdullah Ahmad Badawi, whom focused on transforming Malaysia into a developed nation through the formulas of Vision 2020. The already prevalent unity of this nation needs to be strengthened to create an environment of progressiveness, peace and security. Ensuring national security and political stability will encourage the birth of a more dynamic economy for the country. Mutual respect needs to be inculcated within the people, while negative values such as suspicion, doubt and discontentment should be eliminated; because the truth of the matter is each and every race is already given their due rights.

To realize the 1Malaysia Concept that was introduced in April 2009, he also launched another agenda: the concept of *Wasatiyyah*, which means balance, justice and moderation. This was done to repair the negative perception that outsiders

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and to create a dynamic society capable of competing with others. See Harlina Ismail, 2008, *Wawasan 2020 (Vision 2020)* in Yusof Ismail (ed.), *Dasar-dasar Utama Kerajaan Malaysia (Major Policies of the Malaysian Government)*, Kuala Lumpur, A.S. Nordeen, pp.203-204.

<sup>1</sup> Tun Abdullah Ahmad Badawi was appointed as the fifth Prime Minister of Malaysia on October 31, 2003, replacing Tun Dr. Mahathir Mohamad. His leadership lasted three years. In one of his first speeches as the Prime Minister, he said, "I am deeply humbled by this responsibility which requires me to carry out my duty with trust, honesty, efficiency and fairness. I am aware that I will be evaluated by dignitaries, by the people, and most importantly, by Allah the Almighty." See Chamil Wariya, 2004, *Abdullah Ahmad Badawi: Perjalanan Politik PM ke-5 (Abdullah Ahmad Badawi: The Political Journey of the Fifth Prime Minister)*, Kuala Lumpur, Utusan Publications & Distributors Sdn. Bhd., p.237.

had about Islam, and indirectly create a mutually respectful society regardless of faith (Zakaria, 2010). Such an effort is vital in preventing division amongst the people which would allow outside parties to meddle with the country's affairs.

It is therefore evident from the efforts of the nation's top brass that they always put the people's interest first and foremost. They assume the path of a moderate approach so as to protect the sensitivities and rights of each race to avoid unwanted incidents. The concept of moderation existing throughout each Prime Minister's leadership showcases Malaysia as a nation governed with good judgment calls. In one of his speeches, the President of the United States of America heaped praise on how Malaysia is able to stay on course as a developing and progressive Muslim country while still maintaining its integrity. This serves as proof that Malaysia's leaders are actually very responsible in carrying out the people's mandate, while governing and propelling Malaysia to be on par with other developed nations. Most of the agendas and policies put in place by the Prime Ministers are for the purpose of uniting and nurturing the community to ensure a smoother path for future developments to be implemented. The political stability and economic growth has enabled Malaysia to be at the forefront of all aspects of development rather than playing catch-up behind other nations.

### **The Concept of Moderation in the Current Malaysian Leadership**

Malaysia is a country blessed with political stability, economic growth and a harmonious socio-cultural environment. As a developing nation heading towards the status of a developed nation, Malaysia remains steadfast in its mission by strengthening diplomatic relations with foreign countries to ensure more stability for itself. Currently, Malaysia is being led by a leader who puts great emphasis on the needs and wants of the country. This leader is none other than Dato' Seri Mohd Najib Tun Abdul Razak himself.

Since being appointed as the nation's highest-ranking official, he has been focused on the major issue at hand: unity; without neglecting other aspects of the country's governance. Amongst his agendas are the 1Malaysia Concept which outlines the principle of "People First, Performance Now", the concept of "*Wasatiyyah*" and others. The 1Malaysia Concept was a strategic plan introduced to instigate a united Malaysian race comprising of diverse ethnicities, religion and culture.

Through the implementation of the 1Malaysia Concept, the people's interests will always be protected regardless of religion or faith. Positive core values and mutual respect must be evident in society to avoid suspicion and doubt, more so because each race has the benefit of receiving equal rights and opportunities. However, the status of Islam as the official religion must not be questioned. This protects Islam as the official religion of this country, while giving freedom to citizens from other religions to practice their faith freely in a peaceful environment without restrictions.

The same holds true for the concept of *Wasatiyyah*, where Islamic norms are not neglected and devotees of various other faiths are given a chance to see that Islam is a truly universal religion. This gives security in all aspects of life within a society, more so when other races are involved. In line with the slogan 'People First, Performance Now', the concept of *Wasatiyyah* will bring forth more a comprehensive and universal Islamic teaching that is well-balanced in its quest to meet the country's diverse needs; which will ultimately turn Malaysia into a developed, tolerate Muslim nation to be modelled after by others (Abdul Razak, 2010).

Dato' Seri Najib also mentioned in a speech that according to verse 134 of *Surah al-Baqarah*, Muslims are deemed to be a people of moderation (Ummatan Wasatan), i. e. moderate in his approach, not being overzealous or extreme in the practice of his faith, virtues and deeds concerning both this world and the hereafter. Islam teaches its devotees to be balanced in all regards, controlling oneself not to indulge too much or too little. Thus, the concept of *Wasatiyyah* or moderation is very much applauded and encouraged by Islam, where doing too much is considered extravagant and doing too little is considered careless. Muslims must also not be too rigid or extreme, nor can they be too free without any self-restraint.

<sup>1</sup> The 1Malaysia Concept is based on eight core values which are: a culture of excellence, resilience, humility, acceptance, loyalty, meritocracy, education and integrity. See Ismail Ibrahim, 2013, 1Malaysia Dari Perspektif Agama: Islam dalam Perlembagaan dan Amalan Umat Islam Malaysia (*1Malaysia from a Religious Perspective: Islam in the constitution and the practices of Malaysian Muslims*) in Mohd Sohaimi Esa, Ismail Ali, Dayu Sensalu & Lai Yew Meng (eds.), *Gagasan 1Malaysia: Isu dan Cabaran (1Malaysia Concept: Issues and Challenges)*, Kota Kinabalu, Universiti Malaysia Sabah, p. 1.

Furthermore, the Government Transformation Program has been continually improved in a mission to create a developed society with high income by the year 2020. This program is implemented through 7 National Key Result Areas which put the people's interest first, by means of reducing crime rate, improving infrastructure in rural areas and increasing the income of the poor. As a result, the people's quality of life and standard of living has improved, the nation's economy has grown exponentially and the country's finances strengthen by the day.

Dato' Seri Najib Tun Abdul Razak also strengthened diplomatic relations with "trading partner" countries such as China, Singapore and the United States of America. Such a policy was carried out to protect the nation's political, security and economic interests, among others. It also encouraged tolerance and cooperation between Malaysia and its foreign counterparts, which led to a more structured relationship with the international community. Among the other efforts which he masterminded include, but are not limited to:

Malaysian Education Development Plan.

1Malaysia People's Aid (Bantuan Rakyat 1Malaysia).

1Malaysia Book Voucher.

1Malaysia People's Housing Program (PR1MA).

Urban Transformation Center (UTC) and Rural Transformation Center (RTC) (Omar & Mukhtaruddin, 2010).

Implementing short, medium and long-term strategies that were outlined for the sake of the people's prosperity is no easy task. Many challenges had to be overcome before the plans became reality. Among the challenges faced include having to deal with a small minority of the population whom were religious extremists, unwilling to accept racial diversity, intolerant leaders within certain racial groups and the difficult task of creating an atmosphere of tolerance between different racial groups under the same political party.

Despite those obstacles, Dato' Seri Mohd Najib managed to carry out his duty as the leader of the nation and found effective solutions for those problems. For example, he himself along with the President of the Philippines, Benigno Aquino III, became important witnesses during the signing of the peace treaty between the Philippines government and the Moro Islamic Liberation Front (MILF), an event held in Malacanang Palace, Manila. That treaty is the epitome of Malaysia's success as the gatekeeper during talks between the Philippines government and MILF. Even so, humanity has now entered a modern era of globalization and a world without borders. The instantaneous flow of information technology has changed the way society thinks and acts, which directly affects efforts to solidify the nation and its people. Whatever the case may be, with meticulous planning and proper execution, all challenges can be overcome, one step at a time.

The core of this formula is cooperation between all parties involved regardless of position and embracing the spirit of moderation. This mentality does not intend to create a society of mediocrity and conformity, but rather a society that is well-balanced and fulfils its potential. Any problems or hurdles must be tackled head on with that concept in mind, for the sake of strengthening the state of the nation as well as formulating policies that have a clear direction with respect to the governance of the country in terms of politics, social and economy.

## Conclusion

Each leader has their own unique leadership style when it comes to implementing policies that determine the nation's path. Even though policies are renewed and revamped with the change of each new leadership, the agenda of transforming Malaysia into a developed country by the year 2020 remains the same. Based on this study, each of those leaderships embodied the spirit of moderation and succeeded in creating a nation of peace, harmony and cooperative citizens.

Such is also the case with Dato' Seri Mohd. Najib Tun Abdul Razak's current leadership. He is also imposing the concept of moderation when executing his policies. His policies lean toward the formation of an identity and culture for the society without neglecting the nation's interests in all aspects of life. Despite heavy opposition and challenging obstacles, he utilized the concept of moderation as the gist of his approach without diminishing Islamic principles and still protecting the rights of non-Muslims. The development of the nation will remain well-balanced if it continues to be incorporated with religion and positive virtues. Religion will play a major role in preventing the nation, especially its Muslim citizens, from being easily influenced and intoxicated by the sea of development, modernization, globalization, nationalism and patriotism up to a point where it becomes extreme, extinguishes the positive core values and oversteps religious boundaries.

## References

- [1] Abd. Hamid, Hamidin. 2006. *Tun Hussein Onn: Bapa Perpaduan (Tun Hussein Onn: Father of Unity)*. Kuala Lumpur: Arkib Negara Malaysia.
- [2] Abd Ghani, Zulkiple. 2011. Kepimpinan Islam dan pendekatan Wasatiyyah (Islamic leadership and the Wasatiyyah approach), in Muhammad Mustaqim Mohd Zarif, Paimah Atoma & Hariza Mohd Yusof (eds. ). *Islam and Wasatiyyah*. Bandar Baru Nilai: Universiti Sains Islam Malaysia.
- [3] Abd Rahman, Mohd Fitri & Sakdan, Mohd Foad. 2013. *Konflik Politik Perkauman: Strategi dan Penyelesaian Cara Malaysia (The Conflict of Racial Politics: Malaysia's Strategy and Solution)*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- [4] Abdul Aziz, Abdul Rahman. 2010. *Nilai-Nilai Kesepaduan Sosial Dalam Hubungan Etnik: Analisis Ucapan Enam Perdana Menteri Malaysia (Social Cohesion Values in Ethnic Relations: An Analysis of Speeches by Six Malaysian Prime Ministers)*. Sintok: Universiti Utara Malaysia.
- [5] Abdul Razak, Najib. 2010. via <http://1malaysia.com.my/speeches/majlis-perjupmaan-yab-perdana-menteri-bersama-ulama-dan-umara-serta-pelancaran-logo-baru-agensi-agama-dan-persekutuan-dan-negeri/> (October 30, 2013).
- [6] Abdullah, Fadzilah. 2008. *Dasar Pendidikan Kebangsaan (National Education Policy)* in Yusof Ismail (ed. ). *Dasar-dasar Utama Kerajaan Malaysia (Major Policies of the Malaysian Government)*. Kuala Lumpur: Percetakan Zafar Sdn. Bhd.
- [7] Adam, Ramlah. 2004. *Pemikiran Tun Dr. Mahathir Mohamad (The Mind of Tun Dr. Mahathir Mohamad)*. Melaka: Institut Kajian Sejarah dan Patriotisme Graha (Graha Institute of Historical Study and Patriotism). IKSEP.
- [8] Anon. 2009. *Membawa Perubahan: Himpunan Ungkapan Bestari Tun Abdullah Ahmad Badawi (Bringing Change: A Collection of Tun Abdullah Ahmad Badawi's Words of Wisdom)*. Kuala Lumpur: Institut Tadbiran Awam Negara (INTAN).
- [9] Baharom, Noresah. 2007. *Kamus Dewan - Edisi ke-Empat (Kamus Dewan - Fourth Edition)*, Kuala Lumpur: Dewan Bahasa dan Pustaka.
- [10] Ciulla, Joanne. 2004. *Ethics, the Heart of Leadership*. U. S. A: Praeger Publishers.
- [11] Haddara, Mahmoud & Enanny, Faiza. 2009. *Leadership: An Islamic Perspective*. Canada: Memorial University of Newfoundland.
- [12] Hamzah, Masnur. 2010. *Quranic Leadership: Seni Memimpin Gaya Al-Quran (Quranic Leadership: The Art of Leading with the Quran)*. Batu Caves: PTS Islamika Sdn. Bhd.
- [13] Hussin, Hasnah. 2009. *Artikel Kenegaraan dan Hubungan Etnik (Article of Nationhood and Ethnic Relations)*. Kuantan: Penerbit Universiti Malaysia Pahang.
- [14] Ibrahim, Ismail. 2013. 1Malaysia dari perspektif agama: Islam dalam perlembagaan dan amalan umat Islam Malaysia (*1Malaysia from a Religious Perspective: Islam in the constitution and the practices of Malaysian Muslims*) in Mohd Sohaimi Esa, Ismail Ali, Dayu Sensalu & Lai Yew Meng (eds. ). *Gagasan 1Malaysia: Isu dan Cabaran (1Malaysia Concept: Issues and Challenges)*. Kota Kinabalu: Universiti Malaysia Sabah.
- [15] Ismail, Harlina. 2008. *Wawasan 2020 (Vision 2020)* in Yusof Ismail (ed. ). *Dasar-dasar Utama Kerajaan Malaysia (Major Policies of the Malaysian Government)* Kuala Lumpur: A. S. Nordeen.
- [16] Jaafar, Faridah. 2007. *Perdana Menteri dan Dasar Luar Malaysia 1957-2005 (Prime Ministers and Malaysia's Foreign Policies 1957-2005)*. Kuala Lumpur: Penerbit Universiti Malaya.
- [17] Karimi, Barine A. 2007. *Successful Leadership: 8 Principles You Must Know*. U. S. A: ABC Book Publishing.
- [18] Md. Zin, Abdullah & Jusoh, Khairil Annas. 2012. *Pendekatan Wasatiyyah dalam Menghayati 1Malaysia (A Wasatiyyah Approach in Embracing 1Malaysia)*. Kuala Lumpur: Kasturi Jingga Sdn. Bhd.
- [19] Muhamat, R. 2010. *Kepimpinan dan Pengurusan Islam: Sejarah, Teori dan Pelaksanaan (Islamic Leadership and Management: History, Theory and Execution)*, Bangi, Universiti Kebangsaan Malaysia.
- [20] Northouse, Peter G. 2011. *Leadership: Theory and Practice - Fifth Edition*. United State: Sage Publication.
- [21] Omar, Rusdi & Mukhtaruddin, Mas Juliana. 2010. *Dasar luar Malaysia era Dato' Seri Mohd Najib Tun Razak: Keutamaan dalam aspek hubungan dua hala (Malaysia's foreign policies in Dato' Seri Mohd Najib Tun Razak's era: The priorities in a two-way relationship)* in *Proceeding Seminar on National Resilience (SNAR 2010) - Political Managements and Policies in Malaysia*. July 13-15, 2010, Hotel Bayview, Langkawi. Organized by Institute of Tun Dr. Mahathir Mohamad's Thoughts, Universiti Utara Malaysia, Sintok, Malaysia.

- [22] Pandian, Sivamurugan. 2007. *Abdullah Ahmad Badawi: 3 Tahun di Putrajaya (Abdullah Ahmad Badawi: 3 Years in Putrajaya)*. Kuala Lumpur: Utusan Publication & Distributors Sdn. Bhd.
- [23] Wariya, Chamil. 2004. *Abdullah Ahmad Badawi: Perjalanan Politik PM ke-5 (Abdullah Ahmad Badawi: The Political Journey of the Fifth Prime Minister)*. Kuala Lumpur: Utusan Publications & Distributors Sdn. Bhd.
- [24] Zakaria, Zabri. 2010. *Peralihan Dasar Perdana Menteri (Transition of the Prime Minister's Policies)*. Kajang: Time Edition.

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## Cross Border Shopping from the Perspective of Domestic Tourists in Padang Besar, Perlis

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### Abstract

Padang Besar is a border town in Malaysia and it is located in the northern part of Perlis, which shares a border with the province of Songkhla, Thailand. This border town is popular for shopping activities among Malaysian and Thai. Most visitors and tourists come during the weekends, sometimes up to thousands at one time. This research paper examines the motivations of cross border shoppers from the perspective of domestic tourists in Padang Besar, Perlis. The objective is to identify the consumer characteristics and analyze the relationship between market characteristics with cross border shopping. This study employs quantitative method and the data were collected using self-administered questionnaires. Statistical software was used to analyze the 375 returned questionnaires. The findings revealed that most of the domestic tourists came from the lower income group and most of them were day tripper. They tend to spend more on food and beverages, while their average spending is more than RM300. Moreover, market characteristics show strong positive relationship towards this shopping activity. The information gathered is beneficial for both neighbouring countries as the government can help to improve the shopping area by facilitating the development with related tourism infrastructure and amenities.

**Keywords:** shopping tourism, border town, consumer characteristics, market characteristics

### Introduction

Tourism is known as a social, cultural and economic phenomenon that involves a visitor's movement to destinations. The visitor travels from one destination to another for leisure or business purposes. Trippers may experience different environment while they are away from home. Meanwhile, tourists have intention to return home after visit and they stay for short term periods at the destinations<sup>[1]</sup>. In addition, many tourists visit Thailand on business leisure, or shopping trips. Padang Besar, Perlis, is a border town that lies between north Malaysia and south Thailand, and is famous for border shopping activities since the early 1950s. Padang Besar offers a huge market which houses varieties of items for sale and it is known as Padang Besar Business Arcade Complex or PBAC. Previous study indicates that the main attraction of tourism activities in Padang Besar is centered at PBAC as it hosts most shopping activities. Based on observations in Padang Besar, most visitors tend to shop at PBAC than the other shopping venues<sup>[2, 6]</sup>. Observation also reveals that most visitors were domestic tourists. Domestic tourists in this study are Malaysian visiting Padang Besar or specifically, those tourists travelling within a country and do not need passport or visa.

To date, there are few studies conducted in Malaysia based on the cross border shopping activities such as the study on behaviour of Bruneian in Limbang, Sarawak<sup>[2]</sup> and Singaporean outshopping activities in Johor<sup>[14]</sup>. Thus, only a number of

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studies were conducted on cross border shopping pattern in the borderland in between Malaysia and Thailand. Previous researches on Padang Besar were focusing on shopping development and trading activities<sup>[6, 7]</sup>. Hence, this study is conducted to fill in the gap on cross border shopping activities of domestic tourists specifically those in Padang Besar, focusing on the consumer characteristics and market characteristics. Consumer characteristics are often used to predict how likely a group of people to purchase a product, while market characteristics are referring to cheaper price, variety of goods, lower tax, accessibility, communication, social status and opening hours<sup>[4]</sup> that attracts visitors to cross border shopping destination. Herein study, consumer characteristics are discussed based on the demographic profile, travel pattern, and spending pattern of the respondents in Padang Besar.

In line with the above notion, this study seeks to answer the following research questions:

1. What are the consumer characteristics in Padang Besar?
2. What is the relationship between market characteristics with cross border shopping activities?

### **Malaysia Cross Border Shopping**

Malaysia is located in the heart of Southeast Asia and neighboring with nations like Thailand, Singapore, Indonesia, and Brunei. Most of the border towns between Malaysia and Thailand are famous with shopping activities due to duty free areas. Malaysians cross the border to enjoy the tasty Thai food in Thai restaurants or stalls and also a lot of choices for shopping, meanwhile Thai tourists come to Malaysia to buy unique products. The duty free items offered to guests are clothing, cigarettes, alcohols, chocolates, cameras, beauty products, souvenirs, and others<sup>[5, 6, 7]</sup>.

Furthermore, the main factor that influenced the border movement between Malaysia and Singapore is the availability of the transportation links between the countries such as trains, buses, taxis, and cars<sup>[8]</sup>. For Malaysia and Indonesia, the border town is located at Serikin, Sarawak. Ever since long time ago, individuals from both sides have relations and social association, thus enabling people from both nations enjoyed shopping in the border areas in Serikin, Sarawak<sup>[9]</sup>. They like to shop due to such remunerations as affordable price which they can bargain price and variety of goods to be chosen from.

Apart from that, another border town in Malaysia that is known for cross-border activities is located between Malaysia and Brunei. Malaysian and Bruneian cross the border for tourism activities. Most Bruneian cross the border to Limbang to buy groceries. The factors that determined Bruneian to cross the border to Limbang, Sarawak, is a result of the higher discretionary cash flow as there is no wage charge for them in their nation<sup>[3, 10]</sup>. Furthermore, Limbang is known as the center for people to run illegal activities like prostitution. This activity attracts more Bruneian to visit Limbang and encourages them to fulfill their desire.

### **Research Methodology**

In this research, the researcher used simple random sampling in choosing the sample of respondents. The samples of the subject matter involving the domestic tourists who came from every state in Malaysia and having their own reasons to come to Padang Besar. It is mentioned that populations are characterized as individuals, people, associations, gatherings or groups that the researchers hope to answer the questionnaires<sup>[11]</sup>.

This research focused on local tourists who travel to North Malaysia especially to Padang Besar, Perlis, which is famous of its shopping areas. The researcher received 375 valid responses out of 400 self-administrative questionnaires distributed in the border town of Padang Besar. The respondents were randomly selected while they were shopping at major shopping arcade in Padang Besar. The instrument design for this study was adapted from prominent researchers<sup>[12, 13]</sup>.

## Result and Discussion

From the simple random sampling method, the result was obtained and 375 questionnaires were analyzed. For the demographic profiles, it showed that male tourists make up 48.8% and 51.2% female. Previous study mentioned that most Singaporean traveled to another country for shopping reason and spent on clothes, handbags, shoes, cosmetics, and household items<sup>[14]</sup>. It shows that cross border shopping can undoubtedly attract female shoppers because of the speciality of the items which are offered to them. Most of the respondents are aged between 18 – 24 years old.

Majority of the tourists answered that they are single in terms of their marital status. 75.7% of the respondents have certificate/diploma/degree for their education background level. With two highest ranked, 44.5% are students and 36.5% are employed respondents which showed that these two groups always come to the researched area. Employment category (others) showed half percentage value (51.5%) as compared to other categories. Students and housewives are included in the other employment categories based on the survey. Most of the respondents were in the lower income group which was less than RM3000 per month while most of the respondents' household income was less than RM5000.

**Table 1: Demographic Profile of Domestic Tourist**

Variable	Response	Frequency	Percentage
<b>Gender</b>	Male	183	48.8
	Female	192	51.2
<b>Age</b>	18-24	170	45.3
	25-29	98	26.1
	30-34	49	13.1
	35-39	29	7.7
	40-44	12	3.2
	45-49	4	1.1
	50 and above	13	3.5
<b>Marital Status</b>	Single	251	66.9
	Married	94	25.1
	Others	30	8.0
<b>Education Level</b>	Primary	7	1.9
	Secondary	57	15.2
	Certificate/Diploma/	284	75.7
	Degree	27	7.2
	Others		
<b>Occupation</b>	Student	167	44.5
	Employed	137	36.5
	Housewife	28	7.5
	Unemployed	16	4.3
	Retired	10	2.7
	Others	17	4.5
<b>Employment Status</b>	Professional and	46	12.3
	Managerial	27	7.2
	Technical/Supervisory	38	10.1
	ry	19	5.1
	Clerical	52	13.9
	Production/Operatives	193	51.5
	Self-employed Others		

<b>Personal Income</b>	Less than \$3000	298	79.5
	\$3000-\$5000	66	17.6
	\$5000 and above	11	2.9
<b>Household Income</b>	Less than \$5000	314	83.7
	\$5000-\$10000	48	12.8
	\$10000 and above	13	3.5

**Table 2: Travel Pattern**

Items	Frequency	Percentage
<i>Day tripper</i>		
Yes	264	70.4
No	111	29.6
<i>Frequency of border movement</i>		
	11	2.9
Once a week	13	3.5
Once a month	22	5.9
Once in two months	127	33.9
Once in six months	202	53.9
Once a year		
<i>Distance from residence to border town</i>		
	33	8.8
Less than 50km	46	12.3
50km-100km	296	78.9
More than 100km		
<i>Mode of transportation</i>		
Own Transport	212	56.5
Public Transport	44	11.7
Car Pooling	119	31.7
<i>Number of hour spent per trip</i>		
	74	19.7
Less than 3 hours	117	31.2
3-6 hours	184	49.1
More than 6 hours		
<i>Purpose of visit</i>		
	276	73.6
Shopping	39	10.4
Visiting friends and relatives	38	10.1
Business	21	5.6
Transit	1	.3
Others		

For the travel pattern, most of the domestic tourists basically were day trippers, who make the trips to Padang Besar, Perlis. From the survey, about 53.4% of the respondents cross the border at least once a year. The percentage of samples that resides more than 100km from border town was 78.9%, while 49.1% would spend their time more than 6 hours in Padang Besar (). The respondents using public transport has the least percentage (11.7%). Although the availability of high-speed train of KTM, Electric Train Service (ETS) has routes from Kuala Lumpur, Ipoh, and Butterworth to Padang Besar, the tourists tend to use their own transport.

Shopping is the main purpose for domestic tourists to visit Padang Besar. As noted by many researchers, every author noticed that shopping was the primary reason why huge number of travelers taking their outings every year<sup>[14, 15, 16, 17]</sup>. It is also a stated that 51% of the travel study mentioned that the main purpose in having trips in the past year is for shopping

activity [1]. In fact, similar results were discovered, which evaluated that 47% of all those shopping trips taken by visitors asserting shopping as their essential or optional purpose for travel [18, 19]

**Table 3: Spending Pattern**

Items	Frequency	Percentage
<i>Food and beverages (N=362)</i>		
Less than RM50	198	54. 7
RM51-Rm100	124	34. 3
More than RM100	40	11. 0
<i>Clothes (N=359)</i>		
Less than RM100	127	35. 4
RM101-RM150	151	42. 1
More than RM150	81	22. 6
<i>Shoes / handbags (N=256)</i>		
Less than RM100	121	47. 3
RM101-RM150	62	24. 2
More than RM150	73	28. 5
<i>Household items (N=62)</i>		
Less than RM100	41	66. 1
RM101-RM150	12	19. 4
More than RM150	9	14. 5
<i>Cosmetics and beauty products (N=109)</i>		
Less than RM100	66	60. 6
RM101-RM150	17	15. 6
More than RM150	26	23. 9
<i>Toys (N=41)</i>		
Less than RM100	35	85. 4
RM101-RM150	3	7. 3
More than RM150	3	7. 3
<i>Perfumes (N=84)</i>		
Less than RM100	64	76. 2
RM101-RM150	8	9. 5
More than RM150	12	14. 3
<i>Jewelries and accessories (N=75)</i>		
Less than RM100	50	66. 7
RM101-RM150	15	20. 0
More than RM150	10	13. 3
<i>Others (N=145)</i>		
Less than RM100	91	62. 8
RM101-RM150	46	31. 7
More than RM150	8	5. 5
<i>Average spending per visit (N=375)</i>		
Less than RM100	22	5. 9
RM100-RM200	86	22. 9
RM200-RM300	96	25. 6
More than RM300	171	45. 6

On average, most of the domestic tourists are found to spend more than RM300 per visit to Padang Besar. Domestic tourists tend to spend mainly on food and beverages. About 54. 7% of 362 of the respondents spent less than RM50 on

food and beverages. Besides, tourists spent RM101-RM150 on clothes and less than RM100 on shoes/handbags. For the rest of the items, like household items, cosmetics and beauty products, toys, perfumes, and jewelries and accessories showed that tourists spend less than RM100 while they bought the products. Around 145 tourists also spent on other items.

### **The relationship between market characteristics with cross border shopping activities**

There is a significant correlation between market characteristics and cross border shopping which significant value equal to 0.00 less than 0.01 (sig. value = 0.00 < 0.01). The result shows that all of the factors in market characteristics showed the value less than 0.01. This is further supported by the positive coefficient of correlation value. The highest positive coefficient is physical factor and other factors ( $r = 0.765^{**}$ ) continued by product and service attributes ( $r = 0.708^{**}$ ), and shopping area and related attributes showed positive value of 0.699<sup>\*\*</sup>.

Therefore, market characteristics showed strong positive correlation to cross border shopping activities. Three main factors in the market characteristics strongly motivate shoppers to travel to border town. Table below reveals information on border shopping activities. Border shopping activities had strong relationship with market characteristics (p-value=0.000,  $r = 0.803^{**}$ ). The Correlation Coefficient shows the excellent relationship between the variables.

**Table 4: Relationship between market characteristics with cross border shopping activities.**

Market Characteristics	Correlation	.803 <sup>**</sup>
Coefficient	.000	
Sig. (2-tailed)		

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows there is a significant correlation between market characteristics and cross border shopping. All of the factors in market characteristics like product and service attributes, shopping area and related attributes, physical factor, and other factors show the significant value of 0.000. The finding is further supported by the positive coefficient of correlation value which is less than 0.01. Therefore, cross border shopping activities had strong relationship with market characteristics (p-value=0.000,  $r = 0.803^{**}$ ). The Correlation Coefficient shows the excellent relationship between the variables.

### **Conclusion**

There are a few studies on cross border shopping throughout the world, but limited studies are found in Malaysia and most of them only focused on retailer, trading rather than on discovering the motivation, behavior, and personal characteristics of cross border shoppers who purchase at the border town. In this study, the review is on the domestic tourist profiles, their spending patterns, border movement, and the factors motivating the tourists to travel. The relationship between the variables is discovered.

As a result, the product and service attributes, shopping area and related attributes, and physical factors are the factors perceived by the respondents, thus noting that the major factor that influenced shopping activities is product and merchandise offered in that place. This statement is also supported by other researchers who observed the range of prices as the factor that makes shopping activities as a pleasurable experience [20].

### **References**

- [1] Anaman, K. A., & Ismail, R. A. (2002). Cross-border tourism from Brunei Darussalam to eastern Malaysia: An empirical analysis. *The Singapore Economic Review*, 47(1), 65-87.
- [2] Azmi, A., Hamid, I. A., Ahmad, J. A., & Ramli, R. A. (2016). *Tourism supply chain perspectives on border shopping development at Padang Besar, Malaysia in balancing development and sustainability in tourism destinations*. Springer.
- [3] Azmi, A., Ngelambong, A., Anuar, J., & Lahap, J. (2015). Border shopping activities, facilities and development in Padang Besar, Perlis. *Hospitality and Tourism 2015: Proceedings of HTC 2015 (Malacca, Malaysia, 2-3 November 2015)*, 361.

- 
- [4] Azmi, A., Sapi, M. E. A., & Rahman, S. M. S. A. (2015). Factors influencing cross-border shopping. *ESTEEM Academic Journal*, 11(2), 27–34.
- [5] Azmi, A., Sulaiman, S., Asri, D. A. M., & Razali, M. A. (2015). Shopping tourism and trading activities at the border town of Malaysia-Thailand: A case study in Padang Besar. *International Academic Research Journal of Social Science*, 1(2), 2015, 83-88.
- [6] Bakar, N. R. A., Abdullah, M. Y., & Awang, A. H. (2012). Kesejahteraan bersama melalui hubungan dagangan dan sosial di sempadan Kalimantan Barat dan Serikin, Sarawak. 8(8), 91-95.
- [7] Barter, P. A. (2006). Multiple dimension in negotiating the cross-border transport links that connects and divide Singapore and Johor, Malaysia. 47(2), 287-303
- [8] Beck, R. (1998, July 30). Forget the beach, travelers' option for the mall on vacations. *Sentinel Tribute (Bowling Green)*.
- [9] Clark, T. (1994). National boundaries, border zones, and marketing strategy: A conceptual framework and theoretical model of secondary boundary effects. *Journal of Marketing*, 58, 67-80.
- [10] Howard, E. (2007). New shopping centres: Is leisure the answer? *International Journal of Retail and Distribution Management*, 35(8), 661-672.
- [11] Ibrahim, J. A. & Ahmad, M. Z. (2010). *Cross-border tourism: Potential and challenges*. 2, 260-272.
- [12] Jansen-Verbeke, M. (1991). Leisure shopping: A magic concept for the tourism industry. *Tourism Management*, 12, 9-14.
- [13] Kitchenham, B., & Pfleeger, S. (2002). Principles of survey research part 2: Designing a survey. *ACM SIGSOFT Software Engineering Notes*, 27(1), 18-20.
- [14] Lau, H., Sin, L., & Chan, K. (2005). Chinese cross-border shopping: An empirical study. *Journal of Hospitality and Tourism Research*, 29(1), 110-133
- [15] McCormick, R. R. (2001). *Shopping*. Paper presented at the Travel Industry Association of America Marketing Outlook Forum.
- [16] Piron, F. (2002). International outshopping and ethnocentrism. *European Journal of Marketing*, 36(1/2), 189-210.
- [17] Subramaniam, T., Devadason, E., & Sundararaja, S. (2008). Cross-border shopping behaviour of Bruneians in Limbang, Sarawak: A preliminary analysis. *Borneo Research Journal*, 2.
- [18] Timothy, D. J. (2005). *Aspects of tourism, shopping tourism, retailing and leisure*. Channel View Publications.
- [19] Timothy, D. J., & Butler, R. W. (1995). Cross-border shopping: A North American perspective. *Annals of Tourism*, 22(1), 16-95.
- [20] Travel Industry Association of America. (2001). *The shopping traveler*. Washington, DC.

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## Leadership as Important Factor for Agricultural Development in Albania

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### Abstract

An important challenge for the development of the Albanian agriculture remains the small surface and farm fragmentation. A chance for enhance with a sustainable impact is the agriculture development based on the principles of collective action. The objective of the study is measurement of the importance of leadership perceived by farmers and farmers' willingness to cooperate among main agricultural activities in Albania. The study will investigate farmers in two important agricultural sectors – vegetable production in greenhouses and apple production. Study measures the impact of leadership as a factor which increases farmers' potential for collective action, illustrated by vegetable producers in greenhouses and apple producers. Results of the research show that leadership is an important factor for development of collective action in Albanian agriculture. The results are especially important for agricultural sectors of vegetable production in greenhouses and apple production, but they can also be useful for undeveloped agricultural regions. Promotion of leadership in farming communities will have benefits beyond agriculture by promoting good management and maintenance of common resources.

**Keywords:** collective action, greenhouse vegetable producers, apple producers, community

### Introduction

During the past 20 years, Albania has transformed from an agricultural oriented economy to a service oriented economy. However, the high mobility of workforce within and outside the country has created a number of issues in the area of employment, land and capital associated with the use of resources. Due to these developments new urban centres have developed. However, the national fund of farmland has been reduced and irrigation and drainage canals were damaged, hence hampering even more the farming activities. Consequently, in some rural areas with deteriorating features and lack of resources, the unemployment and the overall migration indicators has been increased. The development of agriculture would reduce these effects and it would have sustainable impact. But the development of agriculture in Albania faces the problem of consolidation of agricultural farms. The consolidation would be an opportunity to simultaneously increase agricultural production and access to the market, which would fulfil the main objective of the farmers - maximization of the profit. Given the small size of the farms this is still a challenge. Albania has approximately 350 000 farms, with size ranges between 1 and 1.2 ha. Structurally, the farms are quite fragmented as the pieces of land, even of the same family members, are not connected to each other.

Farm size has grown very slowly from 1.04 ha to 1.2 ha in year 2000. Land fragmentation combined with small farm size represents the structural problem which is resulting in low competitiveness of the sector (Skreli and McCalla 2013) (Skreli et al. 2011). Important alternative for overcoming this structural problem is cooperation among farmers based on principles of collective action (Kola et al. 2014). Interdisciplinarity of the collective action is represented in an extensive literature sources (Olson 2002, Agrawal et al. 2009; Ostrom and Ahn 2007; Kurosaki 2005; Ostrom 2003; McCarthy et al. 2002; Meinzen–Dick et al. 2002; Johnson 2000; Baland and Platteau 1997; White and Runge 1994).

Olson believes that the development of relations at individual level or on a group basis simply by following the general theory upon which the logic of collective action is based including factors such as the personal and public interests, the leadership from rationality or the impact of emotional nature, not only cannot be too simple – but in special cases can perhaps be even completely impossible (Olson 2002). Ostrom and Ahn have an opinion that political and economic performance of companies based in rural areas depends critically on the way how the community members are solving the problem of collective action (Ostrom and Ahn 2007).

Moreover, the issues of collective action and cooperative agriculture face a particularly complicated problem in Albania. However, because of the small farm size and land fragmentation, farmers encounter many difficulties while improving technology at the farm level, providing inputs, selling their farm products and facing unfair competition from input suppliers and traders. Hence, there is no better alternative than cooperation among farmers (Skreli et al. 2011).

The asymmetry of information, limited sanctions, enforcement mechanisms and lack of monitoring create conditions through which the opportunistic behavior can dominate. Banaszak explained that the same forms of cooperation in collective action in the similar environment can bring different results (Banaszak 2008). The question is why certain cooperation agreements on agricultural markets are successful, while others are not. The main purpose of these agreements is to organize joint sale of products that were individually produced by the members of the agreement. Some of the groups of producers are effective, while others are not. Banaszak states that variables such as the strength of leadership, previous knowledge in the field of business, the initial selection of members and the number of members have a significant positive impact on the chances of success in the analyzed groups of producers (Banaszak 2008).

For the promotion and the development of collective action economic and social factors, such as the level of wealth or farmland size, income and employment, as well as human and social capital, are crucial. Krishna says that there are communities that are more cooperative, where members care for each other and are prepared to act collectively for a common purpose, while in other communities there is internal war, disagreements, jealousy and selfishness (Krishna 2004). The concept of social capital has the focus on these differences in groups as they influence the results that the group can achieve in practice. Krishna raises the logical question, which is why a certain community has a higher profit when it has the same program as the other, especially when the two communities receive the same overall level of resources (Krishna 2004). A number of different reasons, such as quality of leadership and effectiveness of the human resources, can explain the observed differences. Leadership in this context represents a defining factor that goes beyond agriculture. The quality of decision making in farming communities is directly related to the use of resources in rural areas.

This study will examine importance of leadership as a determining factor for stimulation of collective action for farmers in two important and growing agricultural sectors in Albania - vegetables production in greenhouses and apple production.

## MATERIALS AND METHODS

### Vegetables producers in greenhouses — case study I

Vegetable production in greenhouses has become one of the most important export activities for Albanian agriculture. The export of vegetables from greenhouses has increased 9 times between the year 2001 and 2011 (UN ComTrade, 2013). With a rather high labor to land ratio of Albanian agriculture, labor intensive industries are economically justified alternative (Skreli and McCalla 2013). Leadership is an important determinant for cooperation. Banaszak (2008) summarizes the relevant studies with regards to the role of leadership for cooperation from the perspective of game theory and states that in coordinated games, leaders economize the choice by one of multiple balances and in social dilemma games the leadership increases the levels of individual contributions giving an example to the other players and changing the profit structure by introducing penalties for free-riding (Banaszak 2008). The determinants of collective action are grouped into players' and environmental characteristics. Environmental characteristics are measured as perceived by individual producers, which are farmers represented as players. Socio-demographic profile of the sample is given in the Table 1.

Table 1. Socio-demographic profile of the sample (N=200, frequency, percentage in brackets)

Country	Gender	Age (years)						
		N (%)	Female	Male	≤24	25-34	35-49	50-64

	200	15	185 (92.					
Albania	(100)	(7. 5)	5)	0 (0)	5 (2. 5)	130 (65)	64 (32)	1 (0. 5)

Source: Own calculations

Hypothesis: *Farmers' perception over leadership presence increases the chances over collaborative actions.*

The questionnaire is constructed to measure several variables. The data are collected through a survey of 200 questionnaires. The choice method is based on random selection. The sample of 200 respondents is considered sufficient to ensure a precision level of 7% and a confidence level of 95% (Israel 2012).

Perception on leadership is measured by the dummy variable.

Given the fact that the dependent variable is a quality variable dummy, to assess the determinants of collective actions in the case of the vegetables producers in greenhouses the binary logistic model is used. This model uses the maximum likelihood estimation for assessing the parameters of the regression equation.

Binary logistic model can be described by the following equation:

$$\ln\left(\frac{P}{1-P}\right) = a + b_i x_i + c_i z_i + e$$

Where  $P_i$  is the probability that a person participates in a collective action;  $1-P_i$  is the probability that a person does not participate in a collective action;  $a$  is a constant;  $x_i$  and  $z_i$  are respectively the variables that represent the characteristics of individual players and the perception of players for the environment and  $b_i$  and  $c_i$  are vector parameters to be measured. The equation is:

$$\frac{P}{1-P} = e^{a+b_i x_i + c_i z_i}$$

The change of one unit in the stock of social capital leads to an increase  $e^{b_i}$  of the chances that the farmer will participate in collective action, against the probability that the farmer won't participate. Binary logistic regressive model is preferred against the linear probability model, binomial or multinomial. Other regression models assume that the marginal effect of independent variables over the dependent variables is constant for different levels of the independent variables. Since we have no evidence that this may be a case, the regressive logistic model comes as a solution, because it does not include this assumption. Regarding the possible marginal effects, we may say that linear regressive model is just a special case of the logistic model.

Based on the model results, leader has a strong influence on farmers to undertake collective actions in greenhouses in Albania. Leadership ratio (4, 166) shows that farmers are 4 times more likely to cooperate than not to cooperate if there is a reliable and competent leader among them.

### Apple producers — case study II

The apple production is important for Albanian agriculture. The production of apples in Albania has grown from 12. 000 to 54. 000 tons from the year 2000 to 2010 (FAOSTAT 2010) and from the demand point of view, the expenses for apple consumption are the highest (FAOSTAT 2010). A number of studies (Meinzen Dick-et al. 2002; Kurosaki, 2005; Banaszak 2008) identify leadership as an influential factor in the decision-making connected to collective action in farming community. Other authors (Skreli et al. 2011) have found a positive impact of leadership on the collective action in Albania. In the last two decades farmers have experienced role of leadership and learned whom to trust and whom not. Determinants of collective action are grouped to measure factors connected to farmer's perception. There are individual and environmental characteristics. The leadership is measured as part of environmental characteristics. Leadership is a dummy variable and it is taking the value 1 for farmer's perception on the presence of leadership and value 0 for farmer's perception that there is lack of leadership. Socio-demographic profile of the sample is given in the Table 2.

Table 2. Socio-demographic profile of the sample (N=220, frequency, percentage in brackets)

Country	N (%)	Gender		Age (years)				
		Female	Male	≤24	25-34	35-49	50-64	≥65
Albania	220 (100)	20 (9.1)	200 (90.9)	0 (0)	7 (3.2)	141 (64.1)	69 (31.4)	3 (1.4)

Source: Own calculations

Hypothesis: *The perception of farmers on the presence of leadership increases the opportunities for collective action.*

The questionnaire was constructed in order to measure the factors and the leadership variable. The data are collected through a survey of 220 questionnaires. The choice method is based on random selection.

The econometric model that was build was the linear probability model, which transformed the average in a qualitative binary variable (dummy). The linear probability model, known as the method of least squares, is presented as follows:

$$Y_i = a_i X_i + b_i Z_i + e$$

Thus, the probability ( $Y_i$ ) is equal to the sum of two systematic factors  $a_i X_i + b_i Z_i$  and  $e$  is the error term. Moreover,  $a_i$  is the coefficient before the individual's features  $X_i$  that represents a partial probability, while  $b_i$  is the coefficient before the environmental features  $Z_i$ . Thus, summarizing,  $a_i X_i$  include the individual characteristics and  $b_i Z_i$  the environmental features.

#### Results interpretation

Based on the model results, leader has a strong influence on farmers involved in apple production in Albania to undertake collective actions. With the presence of capable leader there is increase of approximately 19,3% of a possibility that farmers will participate in collective action.

#### CONCLUSION

In the both cases results show that variable leadership is a determinant factor for participation in collective action of farmers who are involved in vegetables production in greenhouses and farmers who are apple producers. Results for both case studies are also clear evidence that farmers' perception of good leadership in rural community increases the possibility of involving in collective action. The results are very important for production in greenhouses and production of apples, but also for other agricultural activities in terms of their development potential in the future.

The statistical significance of leadership suggests that development of economic factors and rapid growth, as illustrated in two case studies, can overcome the lack of confidence from the past between the members in the community, and provide opportunities. On the other hand, it can also contribute to the agricultural regions with lower index of development, encouraging and promoting a credible and competent leadership as a new option to improve the conditions for common actions while increasing initial forms of cooperation with reciprocal interest between members. This would help policymakers and public bodies, as well as agricultural business operators to better understand and address further investments.

The growth and strengthening of the role of leadership in the farming communities would also be useful for the promotion and development of agriculture. Furthermore, it would bring positive effects, such as raising awareness for degree of competence and quality of decision-making concerning the use of resources and rural development. The scale and intensity of the use of resources, such as land, forests and rivers for economic development and growth, implicates costs and requires quality of agricultural products.

#### REFERENCES

- [1] Agrawal A., Kononen M., Perrin N. (2009): The Role of Local Institutions in Adaptation to Climate Change. *Social Dimensions of Climate Change*, 118: 1-23.
- [2] Baland J. M., Platteau J. P. (1997): Wealth inequality and efficiency in the commons - Part I: The unregulated case. *Oxford Economic Papers*, 49: 415-482.

- 
- [3] Banaszak I. (2008): Determinants of successful cooperation in agricultural markets: evidence from producers groups in Poland. *Strategy and Governance of Networks*, 1:27-46.
- [4] FAOSTAT 2010 Available at <http://faostat3.fao.org/home/E>
- [5] Israel G. D. (2012): Determining Sample Size. Available at <http://www.psychosphere.com/Determining%20sample%20size%20by%20Glen%20Israel.pdf> (accessed Oct 10, 2016).
- [6] Johnson J. D. (2000): Determinants of collective action on local commons: a model with evidence from Mexico. *Journal of Development Economics*, 62: 181-208.
- [7] Kola R., Skreli E., Osmani M., Tanku A. (2014): Farmers' characteristics as determinants of collective action: the case of Greenhouse Producers in Albania. *New Medit*, 13: 20–27.
- [8] Krishna A. (2004): Understanding, measuring and utilizing social capital: clarifying concepts and presenting a field application from India. *Agricultural Systems*, 82: 291-305.
- [9] Kurosaki T. (2005): Determinants of Collective Action under Devolution Initiatives: The Case of Citizen Community Boards in Pakistan. *The Pakistan Development Review*, 44: 253-269.
- [10] McCarthy N., Dutilly–Diané C., Drabo B. (2002): Cooperation, collective action in natural resource management in Burkina Faso: A methodological note. Available at <http://www.capri.cgiar.org/pdf/capriwp27.pdf> (accessed Sep 20, 2016).
- [11] Meinzen–Dick R., Raju K. V., Gulati A. (2002): What affects organization and collective action for managing resources? Evidence from canal irrigation systems in India. *World Development*, 30: 649–666.
- [12] Olson M. (2002): *The Logic of Collective Action: Public Goods and the Theory of Groups*. 20<sup>th</sup> Ed. Harvard University Press, Cambridge.
- [13] Ostrom E. (2003): How Types of Goods and Property Rights Jointly Affect Collective Action. *Journal of Theoretical Politics*, 15: 239-270.
- [14] Ostrom E., Ahn, T. K. (2007): The meaning of social capital and its link to collective action. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1304823](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1304823) (accessed Aug 25, 2016).
- [15] Skreli E., Kola R., Osmani M. (2011): Factors determining collective action in Albanian agriculture: case of apple producers in Albania. *Albanian Journal of Agricultural Sciences*, 10: 35–41.
- [16] Skreli E., McCalla A. (2013): *Agricultural Markets in a Transitioning Economy: An Albanian Case Study*. CPI Group, Croydon.

## The Challenges of Collective Action for Olive Growers in Albania

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### Abstract

Despite a considerable increase of surfaces with new olive cultivars during last two decades in Albania, the yields have not followed the expected trend. Participation of farmers in common activities would have benefits for costs cutting and efficiency as well as for the commons in a broader economic and social aspect. An opportunity for reducing costs and increasing farmers' income is the organization of farmer's production by the principles of collective action. The research objective is to find factors affecting the olive growers (farmers) participation in collective actions in Berat area, the second largest olive production area in Albania. A questionnaire was designed in order to measure several variables. Interviewing took place from October 2015 to February 2016. Education, access to markets, income and leadership have statistical significance and influence olive producer's participation in activities based on collective action. The research results can be useful to policymakers, public bodies and researchers. The fact that with farm size increase, decrease the possibility of farmer's participation in collective action activities is important finding that helps in understanding the critical financing limits and optimization of the public funds used in creation of public policies.

**Keywords:** agriculture, farmers, Berat, participation

### Introduction

The olive cultivation represents an important traditional agricultural activity in the rural area of Albania concerning the economic, social and environmental impact. This is particularly evident in hilly and mountain areas, where horticulture in general and olive production are among the major agricultural activities. The fact that Albania has about 300 sunny days and abundant hydropower potential provides another argument that meets typology of this agricultural crop. Olives and derivate products, especially olive oil, represents important category of food products for the diet of Albanian families in terms of nutritious food with significant energy value. On the other hand, the production of olives represents a vital activity with economic interest for farmers involved in growing olives. Olive cultivation is related to the tradition and knowledge of farmers in many agricultural areas. One of the most important areas for olive production in Albania is Berat (Table 1). Farmers in this area are among the most important olive growers on national level. Berat area, which is located in southwest Albania and known for centuries for the traditional olive production, is on second place for the number of cultivars on national level (INSTAT 2015).

Table 1. The number of olive trees by prefectures in Albania, thousand trees

Prefectures	Olives
Berat	1. 679
Fier	2. 193
Vlore	1. 548

Source: INSTAT 2015

During the last 2 decades, olive cultivation has expanded as the number of planted trees and yields increased (Table 2). Between 1998 and 2014 the number of planted cultivars has been between 3. 468 million and 8. 620 million trees, while production was between 46 800 tones and 98 000 tones (INSTAT 2015).

Table 2. Number of trees, production and yield of the olive culture over the years in Albania

Olives	1998	2000	2002	2004	2006	2008	2010	2012	2014
Totally (thousand trees)	3. 468	3. 611	3. 809	4. 092	4. 497	5. 011	6. 255	8. 000	8. 994
Production (thousand tonnes)	46. 8	36. 2	27. 3	58. 7	40. 2	56. 2	70	108	98
Yield (kg/plant)	14. 6	11. 1	8. 3	17. 1	11. 2	15. 8	16. 3	25. 9	16. 9

Source: INSTAT 2015

Despite the above indicators yields during the same period were more stable - between 14. 6 kg/trees and 16. 9 kg/trees. A similar trend represents the production of olive oil. Olive production indicators can be justified by the fact that a large proportion of planted young trees have not yet entered the production phase. On the other hand this is explained by rising costs, including input prices over the years, affecting the level and quality of their use by farmers, including agro technical efficiency of operations. A number of chemicals that are used for olive cultivation oblige organization at level group farmers to spray large surfaces for effective protection against diseases and pests. Reducing costs and encouraging positive impact in terms of farmers participation in activities based on the principles of collective action would be a way to overcome this problem. Participation of farmers in common activities would have benefits for costs cutting and efficiency as well as for the commons in a broader economic and social aspect. Organization of farmer's production by the principles of collective action would be an opportunity for reducing costs and increasing farmers' income. Spraying with insecticides and chemicals is important for pest's protection, but marketing, selling of production and the organization at the level of producers is crucial, especially since it is represented in the framework of future integration in the European Union. Structuring based on the functional organization of agricultural producers can serve for buying inputs at low prices as it could give opportunity to use benefits of subsidies, training, new technologies in order to increase production and efficiency in the cultivation of olive trees, all of which in the aim of creating conditions for the increase of farmers income.

A broad framework of the theory of collective action is developed. The first critics of the theory were Bentley and Truman. They believed that individuals with common interests will act voluntarily to achieve these interests (Bentley 1949; Truman 1958). Olson substantially transformed the debate with his new approach that groups will aim to be involved in collective action whenever individuals see benefits (Olson 2002). Moreover, whether appropriate instruments will enable the individuals to manage resources, they will tend to respect and follow the rules (Larson and Ribot 2004). Researchers have agreed that the characteristics of resources are affecting tendencies of individuals to participate in the organizations (Ostrom et al. 1994; Araral 2009). Ostrom and Ahn believe that economic performance in rural communities critically depends on how community members solve problems of collective action. The approach to social capital links the causes and results of collective social behavior (Ostrom and Ahn 2007). Krishna supports the view that in groups of producers there is more disagreement with increasing and strengthening of social capital and that this can contribute to formalize solutions and overcoming differences between members (Krishna 2004).

Banaszak investigates determinants of successful cooperation in agricultural markets and finds that variables such as social capital, power of leadership and previous knowledge in the field of business are crucial regarding the opportunities for success in organizations included in the study (Banaszak 2008). Meinzen-Dick, Raju and Gulati found that organizations with highly educated and influential leaders are more likely to be formed faster and to have more significance (Meinzen-Dick et al. 2002). Krishna believes that the quality of leadership influence the effectiveness of employees to the degree to which members can be involved in collective actions (Krishna 2004).

Considering the discouraging experience of the models of cooperation during communism period and the lack of incentive programs for collective action in the post-communist period, the farmer community in Albania still has a tendency for the relatively low participation in collective actions. There is empirical evidence concerning the lack of collective action in

Albania. Leonetti was expressing skepticism if Albania can have farmers organizations formalized as functional level farmers groups (Leonetti 2009). Situation has changed due to increased production and access to the markets through the years. Skreli and Musabelliu have researched the problem of collective action in Albania (Skreli 1994; Musabelliu 1997). Skreli, Kola and Osmani (2011) were evidencing the importance of leadership and found that the perception of a capable and credible leader particularly affects opportunities of farmers who are apple producers to participate in collective action (Skreli et al 2011). Kola, Skreli, Osmani and Tanku found that there is strong influence of social capital (trainings), human capital, leadership and supply of inputs on collective action (Kola et al. 2014).

## MATERIALS AND METHODS

The study has objective to investigate determinants that affect the opportunities for collective action of olive producers (farmers) in one of the main agricultural production areas in Berat in southwest of Albania. In order to achieve the goal hypotheses have been designed (Table 3). Determinants shown in the table (Table 3) will be measured by the perception of farmers.

Table 3. Determinants of collective action

Determinants of collective action	Hypotheses
Social Capital	With increase of social capital stock the possibilities for collective action are increasing
Wealth	With increase of wealth the possibilities for collective action are increasing
Education	With increase of level of education the possibilities for collective action are increasing
Leadership	With increase of farmers perception for leadership the possibilities for collective action are increasing

Source: Own elaboration

The questionnaire has been created to provide the data and measure a number of variables. Data were collected through a survey that included separate interviews with 220 farmers (Table 4), which was sufficient to provide a confidence level of 95% (Israel 2012). The method of choice is based on a random choice. The data has been subjected to the verification of preciseness.

Table 4. Socio-demographic profile of the sample (N=220, frequency, percentage in brackets)

Country	N (%)	Gender		Age (years)					
		Female	Male	≤24	25-34	35-49	50-64	≥65	
Albania	220 (100)	13 (5.9)	207 (94.1)	1 (0.5)	10 (4.5)	80 (36.4)	113 (51.4)	4 (1.8)	16 (7.3)

Source: Own calculations

Model was determined after the data were collected and measured. In order to measure hypotheses determinants, method of measurement and the respective symbols are presented:

Y = whenever people have collaborated (channel maintenance, livestock preservation, road construction) they have come up with benefit (binary variable; No = 0, Yes = 1);

X1 = education (categorical variable measured by scale of 1 = no elementary school, 9 = higher education);

X2 = wealth based on the number of olives (quantitative variable);

X3 = training for cooperation (binary variable; No = 0, Yes = 1);

X4 = institutions as perceived by the farmer concerning functioning of the market (categorical variable measured with scale from 1 to 5: 1 = totally disagree, 5 = strongly agree);

X5 = the level of income (quantitative variable);

X6 = leadership (binary variable; No = 0, Yes = 1);

X7 = participation in activities (social capital).

In order to measure the degree of participation in social activities the data were organized as follows:

1 = None;

2 = (Group of parents, school committee, sports groups, other);

3 = (Religious group, cultural association, political group, youth group, women's group);

4 = (Savings and credit association, irrigation association, informal quarter union (or village), civil association – free engagement, non-governmental association);

5 = (Farmer group, trade associations, group of businesses, professional associations, syndicates).

Since the dependent variable is a dummy qualitative variable, for evaluation of the determinants the binary logistic regression model was used. Binary logistic model has the following form:

$$\ln\left(\frac{P_i}{1 - P_i}\right) = \beta_0 + \beta_1 \cdot x_{i1} + \beta_2 \cdot x_{i2} + \dots + \beta_k \cdot x_{ik} + e$$

Where  $P_i$  is the probability that farmer  $i$  finds interest in participation in collective action as a profit opportunity;  $1 - P_i$  represents probability that the farmer do not find interest in participation in a collective action as a profit opportunity;  $x_i$  represents respective variables concerning the characteristics of the individual players and their perception; and  $\beta_i$  represents parameters that are going to be measured. Equation is given in the form:

$$\frac{P_i}{1 - P_i} = e^{\beta_0 + \beta_1 \cdot x_{i1} + \beta_2 \cdot x_{i2} + \dots + \beta_k \cdot x_{ik} + e}$$

And the probability is:

$$P_i = \frac{e^{\beta_0 + \beta_1 \cdot x_{i1} + \dots + \beta_k \cdot x_{ik} + e}}{1 + e^{\beta_0 + \beta_1 \cdot x_{i1} + \dots + \beta_k \cdot x_{ik} + e}}$$

## RESULTS AND DISCUSSION

For obtaining the results SPSS program was used and forward Wald method was chosen because more variables were included in the model. The program stopped in the step number 7 (Table 5) and the variables that had significant results by a level of importance 10% are shown in Table 6.

Table 5. Model indicators

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
7	102.853 <sup>a</sup>	.541	.725

Source: Own calculations

Table 6. Statistically significant variables

Variables in the Equation							
	B	S. E.	Wald	df	Sig.	Exp(B)	
	Educ.	.299	.144	4.310	1	.038**	1.349
	Nr_olives	-.004	.002	3.023	1	.082*	.996
	Training_coop.	1.918	1.013	3.585	1	.058*	6.809
Step 7g	Market_funct.	1.116	.286	15.248	1	.000***	3.052
	Incomes	.502	.140	12.868	1	.000***	1.653
	Group_leader	4.266	.816	27.317	1	.000***	71.213
	Particip. in activities	.297	.173	2.960	1	.085*	1.346
	Constant	-10.970	2.675	16.812	1	.000***	.000

\* significant for the level of importance 0. 10  
 \*\* significant for the level of importance 0. 05  
 \*\*\* significant for the level of importance 0. 001

Source: Own calculations

Model results show that the measured variables have a positive impact for increasing the possibilities for cooperation as an instrument that increase farmer profits. In the case of farm size this impact is negative, meaning that with increase of farm size decreases the possibility that cooperation would be used as a tool for profit increasing. This finding represents an important element in the research concerning the large farms, because farmers do not see the cooperation as an opportunity they could benefit from. Another crucial result of the research is very high impact that leadership (measured as Group\_leader) has as an opportunity for participation of farmers who are olive growers in co-organizations based on the principles of collective action. In this case, the farmer's possibility to see it as an opportunity for cooperation is 71. 213 times higher than not to see it as such opportunity.

### Conclusion

The research has achieved the goal by enabling an analytical presentation of the factors that affect the opportunities for increasing the cooperation between farmers who are olive growers in Berat area in the southwest of Albania. The findings of the research are confirming hypothesis and they are in line with previous studies. The results can be useful to interested policymakers, public bodies and researchers who are offering a framework of knowledge concerning opportunities for reducing costs and increasing income for farmers who are olive growers as well for the general agricultural and regional development. From a theoretical perspective the study supports findings that the size of the farm and trust in leadership affect the farmers' perception and their behavior to participate in the collective action activities. The results can serve as a theoretical basis for future research in this area.

The impact of education (measured as educ. ) is important for the participation of farmers in functional activities according to the principles of collective action. This finding supports a broad theoretical framework. The negative impact of farm wealth (measured as nr\_olives), also represents an important finding. The fact that with increase of farm size decreases the potential for collective action is not a surprise. In previous studies on collective action similar evidences have indicated that the readiness of farmers for collective action differ not only for different activities (apple growers, vegetable growers in greenhouses), but it can also differ within the same activity concerning the size of the farm (Skreli et al. 2011; Kola et al. 2014). This evidence requires attention, especially from policymakers and public bodies that finance agriculture, in order to understand the limits of financing and for finding the balance that optimize the efficiency of public funds used in the case of policies or increasing incentives efficiency. Meanwhile, increased importance of the leadership role represents a crucial factor for farmers. The role of competent leadership concerning complicated agricultural issues of production and marketing is very important for increasing of trust and cooperation between stakeholders in rural community.

### REFERENCES

- [1] Araral E. (2009): The strategic games that donors and bureaucrats play: An empirical rational choice analysis. *Journal of Public Administration, Research and Theory*, 19: 853–871.
- [2] Banaszak I. (2008): Determinants of successful cooperation in agricultural markets: evidence from producers groups in Poland. *Strategy and Governance of Networks*, 1:27-46.
- [3] Bentley A. (1949): *The Process of Government: A Study of Social Pressures*. Principia Press of Illinois, Illinois.
- [4] INSTAT (2015): *Statistical Yearbook, 2010-2014*. Available at [http://www.instat.gov.al/media/318992/statistical\\_yearbook\\_2014.pdf](http://www.instat.gov.al/media/318992/statistical_yearbook_2014.pdf) (accessed Oct 20, 2016).
- [5] Israel G. D. (2012): *Determining Sample Size*. Available at <http://www.psychosphere.com/Determining%20sample%20size%20by%20Glen%20Israel.pdf> (accessed Oct 10, 2016).
- [6] Kola R., Skreli E., Osmani M., Tanku A. (2014): Farmers' characteristics as determinants of collective action: the case of Greenhouse Producers in Albania. *New Medit*, 13: 20–27.
- [7] Krishna A. (2004): Understanding, measuring and utilizing social capital: clarifying concepts and presenting a field application from India. *Agricultural Systems*, 82: 291-305.
- [8] Larson A. M., Ribot J. C. (2004): Democratic decentralization through a natural resource lens: An introduction. *European Journal of Development Research*, 16: 1–25.
- [9] Leonetti L. (2009): *Research study*. FAO, Budapest.

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- [10] Meinzen–Dick R., Raju K. V., Gulati A. (2002): What affects organization and collective action for managing resources? Evidence from canal irrigation systems in India. *World Development*, 30: 649–666.
- [11] Musabelliu B. (1997): Family farms and the alternatives of cooperation in Albanian agriculture, Institute of Economy, Finance and Business, Tirana.
- [12] Olson M. (2002): *The Logic of Collective Action: Public Goods and the Theory of Groups*. 20<sup>th</sup> Ed. Harvard University Press, Cambridge.
- [13] Ostrom E., Ahn, T. K. (2007): The meaning of social capital and its link to collective action. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1304823](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1304823) (accessed Aug 25, 2016).
- [14] Ostrom E., Gardner R., Walker J. (1994): *Rules, Games, and Common–Pool Resources*. University of Michigan Press, Michigan.
- [15] Skreli E. (1994): *La Place Future de la Formule Associative au Niveau de la Production Agricole en Albanie*. University of Cukorova, Adana.
- [16] Skreli E., Kola R., Osmani M. (2011): Factors determining collective action in Albanian agriculture: case of apple producers in Albania. *Albanian Journal of Agricultural Sciences*, 10: 35–41.
- [17] Truman D. B. (1958): *The Governmental Process*. Knopf, New York

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## The Role of Psychological Empowerment and Organizational Citizenship Behaviors on Employee Resistance to Change

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### Abstract

In today's competitive business world, change is *inevitable* for organizations. During an organizational change, the toughest challenge of organizational leaders is to manage employee resistance to change. It is well established in literature that employee *resistance* is *one* of the leading *causes* for the *failure of organizational change efforts*. The purpose of this paper is to explore the impact of psychological empowerment and organizational citizenship behaviors on employee resistance to change. It also investigates if psychological empowerment can be used as a human resource management strategy during a planned change in order to increase commitment to change. The study took place in Turkey in a private company which went under a strategic organizational change recently. Survey collection from employees and interviews with two human resource managers were the main tools in collecting information. The results from 85 respondents showed that both psychological empowerment and organizational citizenship behaviors have significant negative influence on employee resistance to change. The interview results showed that through psychological empowerment, employees were more involved in change process, took active role in decision making and were more committed to the change. The implications of the study can be used by organizational change practitioners to maintain employees' positive reactions to change by considering psychological empowerment and organizational citizenship behaviors as a tool to lower the level of resistance.

**Keywords:** Psychological empowerment, organizational citizenship behaviors, employee resistance to change, commitment to change

### Introduction

Organizational change has been a major business trend in today's business environment. Change is a need, in some cases a must for an organization. It is complex, challenging and requires intensive effort and time. The main goal to change is to make the organization more effective and efficient in performance and increase its competitive advantage. A great deal of articles and books have been written about change management to provide the answer to successful organizational change. However, organizational change is an extremely difficult in practice, as over 70 percent of organizational change efforts either fail or underperform (Burke, 2011; Cinite et al., 2009). There are many reasons why *organizational change* efforts do not reach their objectives, but employee resistance is often cited as one of the most leading causes for the failure of change initiatives (Bovey & Hede, 2001). In a study of 288 companies who shared lessons and best practices in change management, Creasey found that the top obstacle to change was employee resistance at all levels (Haslam & Pennington, 2004).

Resistance is expected in change management. There is a human tendency to resist change, because it forces people to adopt new ways of doing. Resistance is a natural response to a perceived threat of personal loss. The most common beliefs about resistance are that it is harmful, as it introduces costs and delays into the change process (Ansoff, 1990), and cause lowered morale and disruptive work environment. Employees' resistance is destructive, as it has significant negative effect on essential work behaviors such as employees' organizational commitment, job-satisfaction and positive relationship with intention to leave their organizations (Oreg, 2006).

Resistance to change is critical barrier to the success of the changes; however, with proper change management and leadership, resistance to change can be minimized, even avoided. This can be achieved by engaging employees in the early stage of change process. Capturing and leveraging the passion and positive emotion surrounding a change can many

times prevent resistance from occurring (prosci. com). This can be achieved through employee empowerment and organizational citizenship behavior.

Psychological empowerment refers to a set of psychological states that are necessary for employees to feel a sense of control in relation to their work. It is mainly about how employees experience their work and their role in relation to the organization (Spreitzer, 2007). Empowerment is a management strategy that has been touted by practitioners and researchers as one of the answers that organizations need to meet the challenges of the current business environment, especially in the context of turbulent and dynamic changes. Empowered people are motivated by knowing that they possess the power to produce changes or have the ability to influence the environment within which they are embedded (Chan, 2003). Empowered employees can change the organization to a learning one in such a way that it increases its capabilities continuously and achieve its desired results.

Organizational citizenship behavior is another antecedent that has impact on resistance, as it expresses employee loyalty and identification with organizational goals (Chahal & Mehta, 2010). Additionally, organizational citizenship behavior is another concept which organizations require to survive in the challenging and competitive environment of the contemporary age. If employees work in their own organization as good organizational citizens, they can help their organization to be more competitive and change it into an ambiance full of trust and motivation (Bagheri, Matin & Amighi, 2011). As working under changing circumstances becomes an essential feature of organizations (Lee, Dendrick, & Smith, 1991), organizations will necessarily become more dependent on individuals who are willing to contribute to successful change, regardless of formal job requirements (Somech & Drach-Zahavy, 2004: 281). Behaviors that exceed delineated role expectations, but are important and even crucial for an organization's survival are defined as organizational citizenship behaviors (Brief & Motowidlo, 1986; George, 1990).

In this research, the impact of psychological empowerment and organizational citizenship behavior on employee resistance to change is investigated. This study is important, because the need to understand the effect of resistance has increased significantly in private industries and government organizations over the last decade because of globalization, fast-changing markets and economic developments (Piderit, 2000). Additionally, while much attention has been given to such perspectives and how to overcome resistance to change, the role that positive employees may play in positive organizational change has been largely ignored (Avey & Wernsing, 2008). Therefore, any study that evaluates resistance may provide an important point of reference to understand the variables that support organizational change and it will help change agents and practitioners to create the appropriate interventions to minimize employees' resistance.

## Literature review

### *Employee resistance to change*

Resistance to change is defined as the pattern of organizational behavior that decision makers in organization employ to actively deny, reject and refuse to implement, repress or even dismantle change proposals and initiative. Resistance is the resultant employee's reaction of opposition to organizational change (Folger & Skarlicki 1999). Resistance can be attitudinal and behavioral responses to change. Attitudinal resistance to change would entail a psychological rejection of the need for the change, whereas behavioral resistance would be represented by behaviors that reflect an unwillingness to support the change or unwillingness to stay with the organization through this tumultuous time (i. e. lack of commitment to change) (Chawla & Kelloway, 2004).

In literature, there are many different factors that have been commonly identified as causes of resistance to change. Change starts with the perception of its need so a wrong initial perception is the first barrier to change (Pardo Del Val & Fuentez, 2003) such as inability of the company to look into the future with clarity and denial or refusal to accept any information that is not expected or desired (Kriger, 1996), communication barriers, that lead to information distortion or misinterpretations (Hutt, Walker & Frankwick, 1995). Other reasons may be listed as a low motivation for change (Pardo Del Val & Fuentez, 2003), mistrust of management, a fear of failure/unknown, loss of status or job insecurity, and peer pressure (Kreitner & Kinicki, 2004)

An overview of the literature reveals that resistance to change has more negative consequences than positive ones for employees and organization. It is a key variable affecting change decisions and outcomes and also it might lead to a failure of organizational change (Regar et al., 1994). Resistance can lead to dysfunctional behavior, such as withdrawal (Abramson et al., 1978), decrements in performance (Bazerman, 1982), and acting out (Galphin, 1996). Resistant behaviors,

employees can engage in a work slowdown, loose of loyalty to the organization and motivation to work. The number of absenteeism, errors and mistakes increase (Robbins, 2003). A recent study also found that resistance to change was related to lower levels of job satisfaction and intentions to quit (Wanberg & Banas, 2000). Resistance often results in politics or political behavior (Kotter & Schlesinger, 1989).

#### *Commitment to change*

Employee commitment to change is extremely important for an organization that is embarking on a change program (Michaelis et al., 2010). Herscovitch & Meyer (2002) define commitment to change as a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative. Employees with a high commitment to change are not passive, but active in implementing the change program (Fedor et al., 2006). Commitment to change shows that people may have various motivations to support a change (Herscovitch & Meyer, 2002). Some employees are committed to their organization because they love what they do, or because the organizational goals are in the same line with their own goals. Other employees might be afraid of the things they lose when they quit working or feel obligated to the organization, or to their manager. In the three-component model of commitment (Meyer & Allen, 1991) are three components of commitment distinguished: affective commitment, continuance commitment, and normative commitment.

It can be predicted that there is a strong correlation between psychological empowerment and commitment to change. Study done by Malik et al. (2013), Hashmi and Naqvi (2012), Ambad (2012), Dehkordi et al. (2011) have stated that psychological empowerment has correlated with organizational commitment. Based on the findings from Rashid and Zhao (2010), and Mangundjaya (2013) showed that organizational commitment had positive and significant correlation with commitment to change. It can be assumed that psychological empowerment has positive and significant correlation with commitment to change.

#### *Organizational citizenship behavior (OCB)*

OCB refers to "those organizationally beneficial behaviors and gestures that can neither be enforced on the basis of formal role obligations nor elicited by contractual guarantee of recompense" (Izhar, 2009). Organ (1988) defines OCBs as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. OCBs have 5 dimensions. Altruism is mainly about helping behaviors which is advantageous for the organization (Organ et al., 2006). Conscientiousness consists of behaviors that go well beyond the minimum role requirements of the organization (Law, Wong & Chen, 2005). These behaviors indicate that employees accept and adhere to the rules, regulations, and procedures of the organization. Civic virtue can be demonstrated on a larger scale by defending the organization's policies and practices when they are challenged by an outside source. Courtesy is about preventing problems from arising. Finally, sportsmanship is defined as a willingness on the part of the employees that signifies the employee's tolerance of less than ideal organizational circumstances without complaining and blowing problems out of proportion. More importantly, it is the ability to roll with the punches even if they do not like or agree with the changes that are occurring within the organization.

In an organizational change context, OCB can act like an informal psychological contract for instance through sportsmanship by demonstrating tolerance of less than ideal circumstances without complaining (Omer & Umut, 2007) in most case, change is considered as unexpected or less preferable and also through civic virtue by participating in organizational practices with the concern of the life of the company such as change. In change process, employees with high OCBs will be willing to follow the rules, and directions of change agents, more collaborative and less conflict oriented. Based on Chemyak-Hai and Tziner's findings (2012) OCB remained the only significant predictor of openness to organizational change which indicates willingness to support change and positive affect about its possible consequences (Wanberg & Banas, 2000). Therefore, the following hypothesis is derived:

Hypothesis 1: OCB is negative related to employee resistance to change.

#### *Psychological empowerment*

Psychological empowerment is about psychological states that produce perception of empowerment in the workplace (Rahman, Panatik & Alias, 2014). Researchers, such as Yukl and Becker (2006) and Conger and Kanungo (1988), have defined psychological empowerment as workers' influence in decision making processes that are most commonly

associated with four factors: meaningfulness, competence, choice, and impact. These factors may help make workers feel more motivated and in control of their workplace environment. Empowerment offers the potential to positively influence outcomes that benefit both individuals and organizations (Liden & Tewksbury, 1995).

It has four dimensions. Meaning involves a fit between the needs of one's work role and one's beliefs, values and behaviors (Hackman & Oldham, 1980). Competence (self-efficacy) is an individual's belief in his or her capability to perform task activities skillfully. Self-determination is a sense or autonomy of choice in initiating and regulating one's actions. Impact is the degree to which an employee can influence strategic, administrative, or operating outcomes at work (Spreitzer, 2007).

Empowerment is an important construct in change management. In the literature of change management and resistance, the proposed ways by different authors for overcoming resistance to change are collectively expressed in different words like participation and empowerment (Kotter & Schlesinger 1979; Mabin & Forgeson 2001; Chawla & Kelloway, 2004). Psychological empowerment management practices represent an important contextual buffer against the negative effects of dispositional resistance to change. Psychological empowerment (Spreitzer, 1995) is important concept to consider when dealing with changes at work and improving performance. Psychological empowerment increases employees' sense of personal control and motivates them to engage in work, which in turn results in positive managerial and organizational outcomes (Quinn & Spreitzer, 1997). Main reasons for resistance are feeling excluded from the process and **lack of competence**. By psychological empowerment, employees are allowed to be part of the change, and they can influence the outcome. Psychological empowerment can enhance employees' decision making in change process by giving them increased participation, authority, freedom and information. Lastly, psychological empowerment translates into increased productivity and efficiency, increasing their ability to adapt to change and be more responsive to transforming workplace issues (Lin & Tseng, 2013). In summary, this research proposes the following hypothesis:

Hypothesis 2: Psychological empowerment is negative related to employee resistance to change.

## Methodology

### *Participants*

With convenience sampling method, participants completed the study's instruments on a voluntary basis. The participants who volunteered to take part in the study were 85 employees (47 men, 38 women; mean age=37. 68) in a private company in Istanbul. They had a mean of 13. 5 years of work experience and 7. 3 years at their existing organization. 60% of the participants (N=51) had managerial duties, whereas 40% (N=34) did not have a managerial duty basically working at the clerical level. They all have bachelor's degree; 54 employees also have a master degree.

### **Instrument**

The questionnaire used in this study was 3 pages long and included three sections. Section one was the cover page explaining the purpose and the nature of the study. Section two included demographic questions such as age, gender, tenure track, and position. Section three included 52 questions of measures of psychological empowerment and organizational citizenship behaviors and employee resistance to change. All questions were translated into Turkish for semantic and syntactic equivalence by two research associates. Resistance to change was measured by Oreg (2003) 16-item scale. The 16 items cover four dimensions: routine seeking, emotional reaction, short-term thinking and cognitive rigidity. The Cronbach's alpha reliability was 0. 85. The response scale ranged from 1 (strongly disagree)-7 (strongly agree). Spreitzer (1995) 12-item scale was used to measure psychological empowerment. The measure comprises four dimensions: competence, meaning, self-determination and impact. The Cronbach's alpha reliability was 0. 93. Responses ranged from 1 (completely disagree)-5 (completely agree). To measure employees' OCB Organ's questionnaire (1988) was used. Twenty-four items were used based on five main dimensions (altruism, courtesy, conscientiousness, sportsmanship, and civic virtue). The Cronbach's alpha reliability was 0. 87. The response scale ranged from 1 (strongly disagree)-7 (strongly agree).

## Findings and Results

To test the impacts of model variables, factors were computed and the reliability analyses were done to all of the factors by SPSS 21. 0 version. In order to determine the factor structures of variables, the principal components analysis, method of factor analysis with Varimax rotation was used. Each step was conducted on one- item- a time basis by discarding any item with a factor loading of less than. 50, or which loaded to more than one factor with a. 10 or less difference, or that

singly loaded on a factor. Those factors with Eigenvalues of 1.00 or more were taken into consideration in total variance explained. The internal consistencies of the scales were calculated by Cronbach's Alpha and the factors with Alpha values of .70 were considered to have sufficient reliability.

The analysis starts with designating the descriptive statistics for demographics in order to provide an overall picture of the sample. Table 1 includes descriptive statistics of the participants.

Table 1. Sample Characteristics of Participants

Variable	Group	N	Percentage
Age	up to 30 years	12	14.1
	31 to 40 years	48	56.5
	41 to 50 years	20	23.5
	51 to 60 years	5	5.9
Gender	male	47	55.3
	female	38	44.7
Overall work experience	up to 10 years	26	30.6
	11 to 21 years	45	52.9
	21 and up	14	16.5
Job position	non managerial	34	40
	mid-level management	32	37.6
	senior level management	19	22.4

To test Hypothesis 1, a simple regression analysis was conducted to examine the contribution psychological empowerment to employee resistance to change. The results showed there *is significant negative* relationship between these two variables ( $\beta = -.39$ ,  $p = .001$ ). To test Hypothesis 2, a simple regression analysis was conducted to examine the contribution organizational citizenship behaviors to employee resistance to change. The results showed there *is significant negative* relationship between these two variables ( $\beta = -.34$ ,  $p = .000$ ).

In order to investigate the impact of psychological empowerment as a human resource management strategy during a planned strategic change to increase commitment to change, two interviews were made with human resource division managers separately. 12 questions were asked in total. The answers were based on managers' perception about employees' commitment, as there was no quantitative information about this variable. Based on the answers, the findings were: psychological empowerment gave freedom to employees to be a part of change process. Empowered employees feel a strong sense of ownership for the planned change. Employees felt powerful and confident in decision making especially when the decisions were about their daily task and routines part of change plans. Managers used open communication channels to receive feedback from their employees on a regular base and evaluated the impact of psychological empowerment. Compared with previous experiences, managers believed that employees felt less stressed, more motivated, as employees did not feel like they were forced to change.

## Conclusion

Today's fast-moving environment requires organizations to undergo changes almost constantly (Jones & Brazzel, 2006; Kotter, 2010). Managers and change agents want these changes to succeed and therefore, do anything in their power to achieve this goal. By implementing a change, no matter what size it is, every organization should expect to meet some level of resistance from employees. To reduce this resistance and the negative reactions from within the organization, it is useful and more importantly a need for organizations to know more about the reasons why employees resist. Because of that, the topic of change and resistance is well acknowledged in the literature and is one of the great themes in the social sciences (e. g. Cummings & Worley, 2014; Thompson, 2011).

Organizational scholars and practitioners alike have argued that if organizations are to flourish in the volatile global environment and meet the concomitant challenges of geographic dispersion, electronic collaboration, and cultural diversity, they must become more knowledge intensive, decentralized, participative, adaptive, flexible, efficient and responsive to rapid change. Muir (2014) found that this can be achieved through methods of increasing employee participation and empowering more employees to make decisions. The involvement and participation increase ownership and commitment

to change, and fosters the work environment in which employees are motivated and contributing. It is well established in literature that one of the ways to reduce resistance is to build positive and trustworthy relationship with employees to increase commitment. This can be also reached by psychological empowerment.

Widespread interest in psychological empowerment comes at a time when global competition and change require employee initiative and innovation (Drucker, 1988). Despite of cultural and organizational differences, previous research which found that individual factors specifically employee empowerment support individual readiness for change. (Rafferty & Simmons, 2006; Lam, Cho & Qu, 2007). In this study, it was found that the employees with psychological empowerment show less resistance to change. Empowerment increases employees' participation level in the decision making process, which means encouraging employees to participate more actively in the change. In summary, there is consensus among academics that to introduce change successfully, managers often need to gain the support of employees. To do so, they are advised to use practices that empower employees (Tesluk, Vance, & Mathieu, 1999; Morgan & Zeffane, 2003).

Today, changes in organizational environments, their resultant innovations, and flexibility are emphasized, which necessarily calls for voluntary behavior from members of an organization. Accordingly, an organization should be capable of shifting its members' attitudes and behaviors which act for organizational development from egoistic behaviors. With regard to this issue, many researchers have paid attention to organizational citizenship behavior (Lee, Kim & Kim, 2013). In this study, it was found that employees with organizational citizenship behavior show less resistance, but more commitment. This can be explained in an organizational content as commitment can be seen an employee's attachment to the change program (Ford et al., 2003). This kind of commitment has strong relationship with organizational citizenship behavior (Fedor et al., 2006).

Employee commitment to a change process is of paramount importance for changes to be effective. Lau and Woodman (1995) conceptualized commitment to change as a "specific attitude towards change". The interview results in this study showed that through psychological empowerment, employees were more involved in change process, took active role in decision making and were more committed to the change. Psychological empowerment gives employees desire to support change initiatives and sense of obligation to be supportive of the organization's plans for change, therefore it is essential for HR managers consider psychological empowerment as a tool to increase commitment and also lower the resistance. Based on this findings organizations undergo any change process need to pay attention on this matter.

## References

- [1] Abramson, L. Y., M. E. P. Seligman and J. D. Teasdale. (1978). Learned helplessness in humans: critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.
- [2] Ambad, S. N. A. & Bahron, A. (2012). Psychological Empowerment: The Influence on Organizational Commitment among Employees in the Construction Sector, *The Journal of Global Business Management*, 8 (2), 73-81.
- [3] Ansoff, I. H. (1990), *Implanting Strategic Management*, Prentice Hall International, Ltd. London.
- [4] Avey, J. B., Patera, J. L., & West, B. J. (2006). Positive psychological capital: A new approach for understanding absenteeism. *Journal of Leadership and Organizational Studies*, 13, 42-60.
- [5] Bagheri, G. Matin, H. Z. & Amighi, F. (2011). The relationship between empowerment and organizational citizenship behavior of the edagogical organization employees. *Iranian Journal of Management Studies*, 4(2), 53-62.
- [6] Bazerman, M. H. (1982). Impact of personal control on performance: Is added control always beneficial? *Journal of Applied Psychology*, 67, 472-479.
- [7] Bovey, W., & Hede, A. (2001). Resistance to organizational change: The role of cognitive and affective processes. *Journal of Managerial Psychology*, 16(7), 534-548.
- [8] Brief, A. P. & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, 11, 710-725.
- [9] Burke, W. W. (2011). A perspective on the field of organization development and change: the Zeigarnik effect. *Journal of Applied Behavioral Science*, 47(2): 143-167.
- [10] Chan, Y. H. (2003). A nomological network approach to the study of antecedents, moderator, mediators and outcomes of psychological empowerment., Dissertation, The University of Memphis.
- [11] Chahal, H., & Mehta, S. (2010). Antecedents and consequences of organizational citizenship behavior (OCB): A conceptual framework in reference to health care sector. *Journal Services Research*, 10(2), 366-388.

- [12] Chawla, A. & Kelloway, E. K. (2004). Predicting Openness and Commitment to Change. *Leadership & Organization Development Journal*, 25, 5/6; 485.
- [13] Chernyak-Hai, L. & Tziner, A. (2012). Organizational citizenship behaviors: Socio-psychological antecedents and consequences. *Revue internationale de psychologie sociale* 3 (25), 53-92.
- [14] Cinite I, Duxbury LE & Higgins C (2009) Measurement of perceived organizational readiness for change in the public sector. *British Journal of Management*, 20(2): 265– 277.
- [15] Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13,471–482.
- [16] Cummings, T., & Worley, C. (2014). *Organization development and change*. Stamford, CT: Cengage Learning, 42(2), 81–91.
- [17] Dehkordi, L. F., Kamrani, M. N., Ardestani, H. A., & Abdolmanafi, S. (2011). Correlation Between Psychological Empowerment with Job Satisfaction and Organizational Commitment, *Interdisciplinary Journal of Contemporary Research in Business*, 3 (7), 808-822.
- [18] Drucker, P. (1988). The coming of the new organization. *Harvard Business Review*, 66: 45-53.
- [19] Pedor, D. B., Caldwell, S., & Herold, D. M. (2006). The effects of organizational changes on employee commitment: a multilevel investigation. *Personnel Psychology*, 59(1), 1-29.
- [20] Folger, R. & Skarlicki, L. A. (1999). Unfairness and Resistance to Change: Hardship as Mistreatment, *Journal of Organizational Change Management*, 12(1), 35- 50.
- [21] Ford, J. IC, Weissbein, D. A., & Plamondon, ICE. (2003). Distinguishing organizational from strategy commitment: linking officers' commitment to community policing to job behaviors and satisfaction. *Justice Quarterly*, 20,159-185.
- [22] Galpin, T. J. (1996). *The human side of change*. San Francisco: Jossey-Bass.
- [23] Hackman, J. R., & Oldham, G. R. 1980. *Work redesign*. Reading, MA: Addison-Wesley. Haslam, S. & Pennington, R. (2004). Reducing resistance to change and conflict: A Key to Successful Leadership Resource International, 3-9.
- [24] Hashmi, M. S. (2012). Psychological empowerment to boost organizational commitment, evidence from banking sector of Pakistan, *International Journal of Human Resource Studies*, 2 (2), 132-141.
- [25] Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology*, 87(3), 474-487.
- [26] Hutt, M. D., B. A. Walker and G. L. Frankwick. (1995). Hurdle the Cross Functional Barriers to Strategic Change. *Sloan Management Review*, 36, 3, 22-30.
- [27] Izhar, O. (2009). Organizational citizenship behavior in teaching: The consequences for teachers, pupils, and the school, *International Journal of Educational*, 23, 375-389.
- [28] Jones, B. B., Brazzel, M., & NTL Institute for Applied Behavioral Science. (2006). *The NTL handbook of organization development and change: Principles, practices, and perspectives*. San Francisco, CA: Pfeiffer.
- [29] Kinicki, A. & Kreitner R. (2004). *Organizational Behavior*. [University of Phoenix Custom Edition e-text]. New York, NY: McGraw-Hill.
- [30] Lam, T., Cho, V., & Qu, H. (2007). A study of hotel employee behavioral intention toward adaptation of information technology. *Hospitality Management*, 26, 49-65.
- [31] Lee, U. H. Kim, H. K. & Kim, Y. H (2013). Determinants of Organizational Citizenship Behavior and Its Outcomes. *Global Business and Management Research: An International Journal*, 5(1), 54-65.
- [32] Lee, V., Dedrick, R. & Smith, J. (1991). The effect of the social organization of schools on teachers' efficacy and satisfaction. *Sociology of Education*, 64(3), 190.
- [33] Kotter, J. P. (2010). *Power and influence*. Simon and Schuster. New York: Free press.
- [34] Kotter, J. P. & L. A. Schlesinger (1979) Choosing strategies for change. *Harvard Business Review*, 57, 106-115.
- [35] Kriger, W. (1996). Implementation: The core task of change management. *CEMS Business Review*, 1, 77-96.
- [36] Lau, C. M., & Woodman, R. W. (1995). Understanding organizational change: A schematic perspective. *Academy of Management Journal*, 38(2), 537-554.
- [37] Liden, R. C., & Tewksbury, T. W. (1995). Empowerment and work teams. In G. R. Ferris, S. D. Rosen, & D. T. Barnum (Eds. ), *Handbook of human Resources Management*, 86-403. Oxford, England: Blackwell.
- [38] Li-Fen, L. & Chun-Chieh T. (2013). The influence of leadership behavior and psychological empowerment on job satisfaction. *The International Journal of Organizational Innovation*, 5 (4), 21-29.

- [39] Lunenburg, F. C. (2010). Forces for and resistance to organizational change. *National Forum of Educational Administration and Supervision Journal*, 27(4), 1-10.
- [40] Mabin & Forgeson (2001) Harnessing resistance: using the theory of constraints to assist change management, *Journal of European Industrial Training* 25,168-191.
- [41] Malik, F., Chughtai, S., Iqbal, Z., & Muhammad, R.. (2013). Does Psychological Empowerment Bring About Employee Commitment? Evidence From Telecommunication Sector of Pakistan, *Journal of Business Studies Quarterly*, 5 (5), 14-21.
- [42] Mangundjaya, W. H. (2013). *Organizational commitment's profile during the transformation and its relation to employee commitment to change. (A study at Oil Company in Indonesia during large-scale organizational change)*, Proceedings INBAM Conference, Lisbon, Spain.
- [43] Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- [44] Michaelis, B., Stegmaier, R. & Sonntag, K. (2010). Shedding light on followers' innovation implementation behavior: the role of transformational leadership, commitment to change, and climate for initiative. *Journal of Managerial Psychology*, 25 (4), 408-429.
- [45] Morgan, D. E., & Zeffane, R. (2003). Employee involvement, organizational change and trust in management. *International Journal of Human Resource Management*, 14, 55–75.
- [46] Muir, M. M. (2014). How do you create a culture where all employees take accountability for decision making?. Retrieved from Cornell University ILR School, digitalcommons@ilr on January 4<sup>th</sup>, 2017.
- [47] Omer, T. & Umut, K. (2007). Materialistic attitude as an antecedent of organizational citizenship behavior. *Management Research News*, 30: 581-596.
- [48] Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15(1), 73-101.
- [49] Oreg, S. (2003). Resistance to Change: Developing an Individual Difference Measure. *Journal of Applied Psychology*, 88 (4), 680-693.
- [50] Organ, D. W. (1988). *Organizational Citizenship Behavior: The Goof soldier Syndrome*. Lexington, MA: Lexington Books.
- [51] Organ, D. W., Podsakoff, P. M., & MacKenzie S. P. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. London: Sage Publications. Organ, D. W. (1988). *Organizational Citizenship Behavior: The good soldier*.
- [52] Pardo del Val, M. And C. M. Fuentez. (2003). Resistance to Change: a Literature Review and Empirical Study. *Management Decision*. 41, 1-2.
- [53] Piderit, S. K. (2000). Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of Management Review*, 25(4), 783–794.
- [54] Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics*, 26(2), 37-49.
- [55] Rafferty, A. E., & Simmons, R. H. (2006). An examination of the antecedents of the readiness for fine-tuning and corporate transformation changes", *Journal of Business and Psychology*, 20 (3), 325-350.
- [56] Rahman, A. A. A., Panatik, S. A. & Alias R. A. (2014). The Influence of Psychological Empowerment on Innovative Work Behavior among Academia in Malaysian Research Universities, *International Proceedings of Economics Development and Research*, 78(21), 108-112.
- [57] Rashid, H. & Zhao, L. (2010). The significance of career commitment in generating commitment to organizational change among information technology personnel, *Academy of Information and Management Sciences Journal*, 13(1), 111- 131.
- [58] Regar, R. K. Mullane, J. V. Gustafson, L. T. & DeMarie, S. M. (1994). Creating earthquakes to change organizational mindsets, *Academy of Management Executives*, 8(4), 31-36.
- [59] Robbins, S. P. (2003). *Organizational Behavior*, Prentice Hall, New Delhi.
- [60] Somech, A. & Drach-Zahavy, A. (2000). Understanding organizational citizenship behavior in schools: The relationships between job satisfactions, sense of efficacy and teachers' extra role behavior. *Teaching and Teacher Education*, 16, 649-659.
- [61] Spreitzer, G. M. (2007). Taking Stock: A review of more than twenty years of research on empowerment at work. In *The Handbook of Organizational Behavior*, C. Cooper and J. Barling eds. Sage Publications.

- [62] Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement and validation, *Academy of Management Journal*, 38, 1442-1465.
- [63] Tesluk, P. E., Vance, R. J., & Mathieu, J. E. (1999). Examining employee involvement in the context of participative work environments. *Group and Organization Management*, 24, 271–300.
- [64] Thompson, J. D. (2011). *Organizations in action: Social science bases of administrative theory*. New Brunswick, N. J.: Transaction Publishers.
- [65] Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85, 132-142.
- [66] Yukl, G. A., & Becker, W. S. (2006). Effective empowerment in organizations. *Organization Management Journal*, 3(3), 210-231.

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## Debt-Driven Water Privatization: The Case of Greece

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### Abstract

The privatization of water services is a basic conditionality in the structural adjustment programs imposed by international financial institutions, such as the IMF and the World Bank, on indebted countries. In the same sense, the financial assistance that has been offered to Greece from Troika, since the beginning of the financial crisis, in the late 2009, was accompanied by the commitment, to privatize, among others, the two largest public water companies. The consequences of water privatization policies include increases in prices, poor quality of services, little or no investment, rise of income inequality, high levels of corruption, loss of jobs and deterioration of working conditions. Despite the fact that privatization of water supply companies has been proven to be ineffective in many parts of the world and the *tendency* towards the *remunicipalization* of water services that has lately been detected, international financial organizations continue to set water privatization as conditionality. The unconstitutionality of the policy and the strong opposition of citizens and unions to water privatization seem to be inefficient to prevent the Greek government to proceed to the establishment of a public-private partnership in the water supply sector.

**Keywords:** Debt-driven water privatization: The case of Greece

### 1. Introduction

Many countries, especially developing ones, resort to borrowing from international financial institutions, such as the IMF and the World Bank. These organizations provide funds to governments in immediate financial emergencies. In exchange, governments of the borrowing countries are committed to adopting certain policies as a condition for receiving funds. In most occasions the terms of the contracts entail the rule of 'one size fits all' without taking into consideration the different characteristics of each local economy. The imposed policies are influenced by the dominant economic ideology, neo-liberalism. The basis of the neoliberal theory is the decrease of government power, the freedom and deregulation of the market and the unquestionable privatization of state property (Askitas, 2016).

One of the most common conditionalities is the privatization of water and sanitation systems. Despite the fact that the management of such bodies by private companies has been proven ineffective in many countries, both developed and developing, and the global trend of water remunicipalization, international financial organizations insist on imposing water privatization as conditionality to borrowing countries. A prime example of such actions is the case of Greece.

Since the beginning of the Greek financial crisis, in the late 2009, Greek governments have signed three memorandums of understanding with 'Troika' (a group of three international institutions consisting of the European Commission, the European Central Bank and the International Monetary Fund) in 2010, 2012 and 2015. Troika's mission was to monitor and assess the countries that were receiving loans from the EU and the IMF. The financial assistance offered was combined with a commitment to implement a strict program of conditionality measures, including the privatization of several state-owned companies. Among others, the privatization list included the two largest public water companies in Greece. This act started an array of reactions both in a national and international level. However, even after the strong opposition against privatization and the public statements of the Greek prime-minister disclaiming any thought of commercialization of water, Greek authorities move forward with the privatization of these companies.

The purpose of the present study is to analyze the water privatization policy that international financial institutions impose on indebted countries through conditionality, to present the obligations of the Greek state for water privatization under the memorandums and to investigate the privatization attempts of the two largest supply and sewerage companies of Greece, against the European and international trends. In the end, it makes an effort to outline the potential consequences of water services privatization in Greece.

The rest of the paper is organised as follows. Section 2 presents the international organizations pressure for water privatization policy. Section 3 analyses the conditionality in water sector *privatization* that has been imposed on Greece via the memorandums. Section 4 explores the privatization efforts of the two largest public water companies of Greece, namely the Thessaloniki Water Supply and Sewerage S.A. (EYATH) and the Athens Water Supply and Sewerage S.A. (EYDAP). Section 5 lists the consequences of water services privatization in indebted (and not only) countries and section 6 the potential consequences of water privatization in Greece. Section 7 concludes.

## 2. International organizations pressure for water privatization

Throughout the years, many developing countries, experiencing an economic crisis, call upon international financial institutions to provide them with assistance. The International Monetary Fund (IMF) and the World Bank are the oldest and the most well-known ones. Apart from the aforementioned organisations, other international financial institutions that provide financial aid to developing countries is the African Development Bank, the Asian Development Bank and the Inter-American Development Bank. Any member state of these organizations may request financial assistance, if it lacks sufficient financing to meet its net international payments. Most of these financial institutions frequently cooperate with each other on many levels to provide assistance to their member countries, conditional *upon* the adoption of certain policies (Bank Information Centre, 2017).

The IMF and the World Bank provide loans to governments, especially of poor countries, that are unable to obtain funds through the financial markets and they commit governments to implement certain policies as a condition for receiving funds. In particular, IMF resources provide a cushion that eases the adjustment policies and reforms that a country must make to tackle its balance of payments problems, stabilize its economy and help restore conditions for strong sustainable economic growth (IMF, 2016). Following the request, the IMF and the target country configure a lending “arrangement” which may, depending on the lending instrument used, specify the economic policies and measures the country has agreed to implement to resolve its balance of payments problem (IMF, 2017). The so-called structural adjustment programme usually includes measures aiming to improve the functioning of markets and institutions and promotes, for instance, tax and financial sector reforms, privatization of public enterprises etc. The rationale behind the adoption of structural adjustment programmes is to increase export earnings, through which the target country is expected to pay off its debts (The Thistle, 2000). In most cases, the arrangements are detailed in a ‘Memorandum of Understanding’.

Within the European Union, the Euro area countries, experiencing severe financing distress can request assistance from the European Stability Mechanism (ESM) (European Commission, 2017). The ESM is an intergovernmental institution which raises its funds from the international capital markets and it grants loans in order to safeguard the financial stability of the Euro area. A precondition for the ESM bailouts is the implementation of a tough macroeconomic adjustment programme, prepared by the European Commission, in cooperation with the European Central Bank and, sometimes, with the participation of the IMF. The conditionality includes reforms that focus on: a) fiscal consolidation, such as reductions in government expenditure and public administration costs and increases in revenues through privatizations or tax reforms, b) structural reforms, aiming to increase employment and improve competitiveness and c) financial sector reforms, in order to strengthen banking supervision or recapitalize banks (ESM, 2017).

Although international financial institutions are seemingly neutral, in fact, they are dominated by the interests of industrialized countries. The voting power of countries is determined by their capital contribution to the institutions as well as other political factors associated with their influence on the world (The Thistle, 2000). Specifically, in IMF, the G7 controls more than 40% of the votes on the Board of governors, while the US and the European Union together carry more than 55% of the votes (Bullard, 1999). The rest of the approximately 150 member countries are either under-represented or totally excluded from the decision-making process. In the World Bank, the president traditionally comes from the USA and his choice entails congressional involvement; in the IMF, the managing director is traditionally a European (The Thistle, 2000).

The policies that the institutions impose on borrowing countries are highly neoliberal; they promote 'labor flexibility', tax increases and social spending cuts (especially in education and health), privatization of public sector enterprises and property (particularly utility and public transport companies) and financial liberalization. The neoliberal conditionality regime leads to deregulation of the economy, deprivation of public sector from its property and dismantling of the welfare state; on the other hand, it highly benefits large trans-national corporations and wealthy investors (The Thistle, 2000). The empirical evidence from the implementation of the neoliberal practices shows that these policies have been devastating for people, infrastructure and the environment.

Since the water supply and sanitation system are under governmental control, in most borrowing countries, the privatization of water utilities is included in the broader set of privatization policies that international financial institutions promote through conditionality. Particularly, in 21 countries, which proceeded to a loan arrangement with the IMF and the World Bank, conditionality included the imposition of water privatization or cost recovery requirements (Alexander et al., 2001). Cost recovery is associated with the elimination of state subsidies that increase budget deficit. Specifically, in developing countries, the justification for water privatization is based on the fact that the economy is too weak to provide subsidization of water and sanitation services. In this case, water consumers should cover the cost of these services. Financial institutions claim that the sale of public enterprises will have beneficial effects not only on the water system administration but also on the country's public debt and budget deficit. Moreover, the resources generated through privatization and cost recovery policies could provide access to water to a higher percentage of the population. However, this is not confirmed by the empirical evidence (Alexander et al., 2001).

Among the countries that were forced to adopt water privatization policies are Ghana, Mali, Mozambique, Tanzania, Argentina, Bolivia, Uruguay, Madhya Pradesh, Indonesia, Angola, Benin, Guinea-Bissau, Honduras, Nicaragua, Niger, Panama, Ruanda, Sao Tome and Principe, Senegal and Yemen (Alexander et al., 2001). The last example, in which the process is not completed yet, is Greece. The consequences from the implementation of these policies are examined in section 5.

### 3. Water sector privatization as conditionality in Greece

In the aftermath of the global financial crisis of 2007, Greece was *confronted with the most severe economic crisis* in its post-war history. The Greek sovereign debt crisis began in the late 2009, for reasons that lie *beyond the scope of the present study*. Greece was shut out from borrowing in the financial markets. The austerity measures that were adopted by the government, such as government expenditures cuts, tax increases, shrinkage of the public sector etc, fell short of their goals. In order to avert bankruptcy - and to avoid spreading crisis to other EU countries too, the Greek government requested and received three bailout loans in 2010, 2012, and 2015 from a triad of organizations, called 'Troika', consisting of the European Commission, the European Central Bank and the International Monetary Fund. The financial assistance offered, was combined with a commitment to implement a strict programme of conditionality measures, which were outlined in three Economic Adjustment Programmes, usually referred to as 'Memoranda of Understanding'. Financial disbursements were conditional on the implementation of austerity measures, budget cuts, structural reforms and privatization of several state-owned companies. Among others, the privatization list included the two largest public water companies in Greece.

In the First 'Memorandum of Understanding', the privatization-related conditionality was directly related to the opening of markets in the transport and energy sectors; indirectly, it was imposed through cuts in expenses of public enterprises and public investment, staff reduction in the public sector and divestment of state assets. The primary aim was the reduction of the fiscal balance from 14% of GDP in 2009 to below 3% of GDP in 2014 (European Commission, 2010). This could be achieved through consolidation, based on measures that generate savings in the public sector's expenditures and improve the government's revenue-raising capacity. Specifically, the first adjustment relied on expenditure cuts equivalent to 7% of GDP. The cuts in public spending aimed at releasing resources to be utilised by the *private sector* and subsequently at improving competitiveness. The public investment reduction was set at 0.2% of GDP per year. Among others, the measures included reductions of public employment (0.3% and 0.2% in 2012 and 2013, respectively) and cut transfers to public entities by 0.4% in 2012. On the other hand, tax increases amounted to 4% of GDP. Furthermore, the first memorandum foresaw the reinforcement of the role of the Hellenic Competition Commission (HCC), since network industries were going to be progressively liberalized, especially in the transport (railway services) and energy sectors. Certain measures to achieve greater transparency, improve financial performance and reduce losses in state enterprises were undertaken. The potential divestment of state assets, including those of land owned by public enterprises or the government, was placed under review. The government was also committed to re-examine the scope of improving corporate governance and

strengthen the supervision of state-owned assets. The privatization plan for the divestment of state assets and enterprises was intended to accumulate at least € 1 billion, during the time period 2011-2013, by reducing the state intervention in the real economy, improving market efficiency and cutting fiscal contingencies (European Commission, 2010).

In the Second 'Memorandum of Understanding', the expansion of privatization was a harsh conditionality. The privatization programme aimed at raising revenues by € 50 billion in the medium term; privatization receipts should have been € 4,500 million in 2012, € 7,500 million in 2013, € 12,200 million in 2014 and € 15,000 in 2015 (Second Memorandum of Understanding, 2012). The government was pledged to sell all its remaining shares of the state-owned enterprises, if necessary, in order to achieve the goals of privatization. The establishment of the Hellenic Republic Asset Development Fund (HRADF), in 2011, helped to this end. According to Law No. 3986/2011, the object of the Fund is to exploit the private property of the Greek state and the Greek public entities, whose share capital is entirely, directly or indirectly, owned by the Greek state or legal entities. The public control should be limited only in the cases of critical network infrastructure. The revenues from the exploitation of these assets must be exclusively applied for the repayment of the Greek public debt. Moreover, these proceeds would not substitute fiscal consolidation efforts and they would not be counted in the calculation of the annual general government deficit. The second economic adjustment programme committed the government to transfer to the HRADF all assets that were expected to be privatized in 2012 and 2013 and to expedite the privatization process. At that time, much public property, including the Thessaloniki Water and Sewerage Company (40%) and the Athens Water and Sewerage Company (27.3%), had been transferred to the Fund with the scope of selling it gradually (European Commission, 2017). The intermediate steps, which had to be made, so as to ensure that privatization would be successful in terms of receipts, were included in the restructuring of loss-making firms, state-aid clearance, rights clearance and regulatory changes, including the unbundling of utilities. The driving force behind this decision was that, by transferring assets in key sectors of the economy to more productive uses through privatization and concessions, would encourage foreign direct investment (FDI) and other private investment, supporting the economic recovery and long-term growth. Given the assets targeted for sale, the government anticipated € 50 billion in proceeds over the lifetime of the asset sale program, including at least € 19 billion through 2015. The steps to move the privatization process forward in 2012 were, for the most part, prominently transferring the asset to the privatization fund and appointing the advisors, restructuring of the asset, filling in public policy and regulatory policy gaps, designing the tender process, receiving approval of European Commission regarding to procurement, competition and state aid, running the tender and obtaining all necessary by-law approvals. Moreover, the programme designated that the HRADF would not be able to transfer assets back to the general government. If the Board of Directors of the HRADF determined that an asset was not able to be sold in its current form, it would be sold in pieces or it would be liquidated. The HRADF was able to raise money, on market terms, but it could not grant liens over any of its assets, if this might have prevented or delayed the relevant assets from being privatized. As far as the Thessaloniki and Athens Water and Sewerage Companies are concerned, regulators and pricing policy were established by June 2012 (European Commission, 2012).

In the Third 'Memorandum of Understanding', among others, the Greek authorities were committed to implement a privatization programme in order to support investment. The conditionalities included the establishment of an independent Fund, known as 'Super Fund', targeted to privatize independently evaluated Greek state assets (Law No. 4389/2016, Article 197). The Super Fund was a private development company which would operate for the public good, by applying rules of the private sector (Law No. 4389/2016). The overarching objective of the Super Fund was to manage valuable Greek assets, which would be utilised to the maximum, based on the guidelines of the Organisation for Economic Co-operation and Development (OECD). Its goal was to protect, create and, ultimately, maximize their value which would be monetized through privatizations and other means. The methods of property utilization consist of the privatization through sale, the transfer of any property or personal rights, the leasing of assets, the concession of the right of use or exploitation, the conferral of management and the restructuring of businesses and real estate. Public enterprises monitored by the Super Fund would: a) be subject to the appropriate supervision in accordance with the laws of the state and the EU, b) implement and support the government's policies and c) undertake the provision of 'Services of General Economic Interest' (SGEI) (Law No. 4389/2016). The Super Fund was planned to be managed by the Greek authorities and supervised by relevant EU institutions. Its management would be comprised by three members appointed by the government and two representatives of the creditors with the right of veto (Hellenic Corporation of Assets and Participations, 2017). The revenues from the privatization programme would be used to repay the recapitalisation of banks and other assets, to decrease the debt to GDP ratio and to conduct investments (Euro Summit, 2015). As far as the water policy was concerned, the agreement foresaw the establishment of a stable regulatory regime as a key to propel investment in the water networks

and to protect consumers in terms of pricing policies (European Commission, 2015). The government was obliged to take all necessary actions to fully implement the regulatory framework for water utilities, based on the methodology completed by the Special Secretariat of Water in 2014. The EU would provide technical assistance. The programme also aimed to further enhance and strengthen the water regulator, in order to enable it to take independent regulatory decisions. The privatization method of the Thessaloniki Water and Sewerage Company included the sale of 23% of share capital; HRADF would preserve 74% of the shares. In the case of the Athens Water and Sewerage Company, the privatization method included the sale of 11% of the shares, whereas HRADF would maintain 27% of the shares (European Commission, 2015).

#### 4. Privatization attempts of public water companies in Greece

##### 4.1. Thessaloniki Water Supply and Sewerage S.A. (EYATH)

The Thessaloniki Water Supply and Sewerage Co. S.A., trading as EYATH S.A., was founded in 1998 by Law 2651/3.11.1998 and resulted from the merger of the Thessaloniki Water Supply Organization S.A. (OYTH S.A.) and the Thessaloniki Sewerage Organization S.A. (OATH S.A.). OYTH and OATH, which had been bodies governed by public law, had been converted into *Sociétés Anonymes* on 25.6.1997. The company is supervised by the Ministry of Economy and Finance and the Ministry of Macedonia-Thrace, and its effective term is 99 years, running from 3.11.1998 to 3.11.2097. In the early 2000s, the Interministerial *Commission for Privatizations* decided to sell off the shares from the share capital increase and the existing shares owned by the Greek State - which had been its exclusive shareholder up to that point. In 2001, EYATH's extraordinary general meeting of shareholders unanimously decided to increase the share capital and list the company's shares on the Main Market of Athens Stock Exchange (ATHEX) (EYATH, 2017). The same year, a thirty-year contract was signed in Thessaloniki that granted to the municipal company Thessaloniki Water Supply and Sewerage CO. S.A. (EYATH) the exclusive right to provide water (EYATH, 2017).

In 2012, the transition of public assets into the Hellenic Republic Asset Development Fund (HRADF) was decided. Thus, in 2014, the company stocks were sold partly to the private sector (74% of the share capital is held by HRADF, 5% by the French company Suez, while the remainder are free trading in the Athens Stock Exchange (Asset Development Fund, 2017). However, in 2013, the representative of HRADF announced the sale of 51% of shares of EYATH (Save Greek Water, 2013). After the announcement, a competition was proclaimed for the auction of EYATH and the most prominent interested companies were the Israeli water company Mekorot and SUEZ (which already owned 5% of the shares). These firms would take over the company's management, in association with the Greek construction firm Ellaktor (Petitjean, 2014). Since then, many actions and campaigns occurred in Thessaloniki, aiming to block further privatization of EYATH. Resolutions and demonstrations have been the main tools for citizens to press the government to keep water in public hands. The most significant actions are the 'SOSTE to NERO' coalition and the 'Initiative 136' movement. The 'SOSTE to NERO' coalition was created by unions and has managed to get the support of both local and international forces to its purpose (Petitjean, 2014). The 'Initiative 136' was also created by a group of citizens and unions; its goal was the transformation of EYATH into a cooperative ownership, with the owners being its 'customers', the citizens of Thessaloniki. The concept behind this coalition was that every citizen would buy a non-transferrable share of the company, which was valued at €136 per household. In order to accomplish its goal, the movement 'Initiative 136' called for international assistance from 'ethical investors' and social finance organizations, in order to help takeover EYATH. However, 'Initiative 136' ended in an unfortunate way, when its proposition was not accepted by the HRADF (Petitjean, 2014). Noteworthy is that, on 18<sup>th</sup> May 2014, during an informal but well-organised referendum that was held in Thessaloniki, 98.3% of the citizens voted against water privatization. In the case of EYATH, the term of preserving 50% plus one share of EYATH by the state, was imposed by the Hellenic Council of State; thus, only a minority stake could be sold to the private sector (Council of State decision No 1906/2014). The ratio between the sale price of EYATH and its financial results are similar: about €110 million for a 51% stake, whereas the business posted a net income of €18 million in 2013, a turnover of €77 million, with €33 million cash reserves and €135 million equity (Petitjean, 2014). According to the decision, the next steps adopted by the Government are as follows: 1) selection of consultants from HRADF until the third quarter of 2016, 2) evaluation of alternative options for the sale of 23% of shares, 3) business plan creation and accomplishment, and 4) improving the regulatory framework and adoption of the revised Concession from the Company and the Hellenic government (Asset Development Fund, 2016).

In a Press Conference, on 9<sup>th</sup> September 2016, the Greek Prime Minister stated: 'The public form of water is established. The government tries to increase the revenues and the competitiveness of the company under the governmental control. In this time of free economy and market, it is clear that the governmental control can be ensured by the majority of the

company's shares. The involvement of key investors holding the marginal of shares will enhance the competitiveness of the company. The government will not sell the majority of the shares, water is a public good. Nevertheless, EYDAP and EYATH are part of the market economy, so the government has to be more flexible in its decisions' (Limperis, 2016). However, the decision of the Parliament, taken on 27<sup>th</sup> September 2016, granted the share capital of EYATH that belonged to the state to the Super Fund. People reacted intensely to the undemocratic decision. Water companies' employees went on strike, cutting off even the water supply at the offices of the ruling party (SYRIZA) in Thessaloniki. The case is still in progress, as the actions of citizens, stakeholders and NGOs against the inclusion of water companies in the Super Fund will continue, until it is ensured that these policies will not be implemented.

#### 4.2. Athens Water Supply and Sewerage S.A. (EYDAP)

The municipal Athens Water Supply and Sewerage Company (EYDAP S.A.) is the largest water supply company in Greece with 9,500 km of pipeline length. It provides water services to approximately 4,300,000 customers and sewerage services to 3,500,000 residents in the greater Athens and Piraeus area. The company was founded in 1980 after the merge of the 'Hellenic Water Company' (EY S.A.) and the 'Greater Athens Sewerage Organization' (OAP S.A.). In 1999, EYDAP took its present legal form, as all of its major assets were transferred to the company 'EYDAP Assets' and remained state property. The same year, EYDAP signed a twenty-year contract, stating that the company would undertake the exclusive provision of water services. In January 2000, it was listed on the Main Market of the Athens Stock Exchange (EYDAP, 2017).

In 2012, according to the common ministerial decision 206/25.4.2012, 34,033% shares of EYDAP, which was under the governmental ownership, was decided to be transferred to HRADF (SEKES, 2012). However, this action was not completed, because the EYDAP union requested the cancelation of the decision. This request has been accepted from the Hellenic Council of State and the conflict between civil society and private companies was finally resolved in 2014 after the Hellenic Council of State decision to block any further privatization of these companies for the sake of public health. The fact that the company did not pass entirely into private hands is due to the Greek citizens uprising and the resistance shown by European and international movements. Furthermore, the Court set the condition that the Greek state would maintain at least 50% plus one share, on the grounds that the right of citizens to water access is above any private initiative aiming to make profit through this procedure. In 2014, the company was partially privatized (the Greek state holds 34.03%, the HRADF 27.30%, investor John Paulson 9.99%, and the remainder is in free float in the stock market (Asset Development Fund, 2016). HRADF's 61% stake in EYDAP could be sold for €350 million, which compares well to a net annual profit of €62 million out of a €353 million turnover in 2012, €43 million cash reserves, €881 million equity and €1.2 billion owed to the company by the Greek government and various agencies and businesses (Petitjean, 2014). In 2015, the topic of water companies' privatization reappeared on the government's agenda, as a result of the agreement on prerequisites for loan performance between the Greek government and its creditors. Despite the success of the Pan-European initiative 'Right2water' to gather 32,000 signatures against the commercialization of water (Save Greek Water, 2016), on 27<sup>th</sup> September 2016, the Greek Parliament voted a law on the integration of EYDAP in the Super Fund. Judging from the purpose of the Super Fund and the way it operates, it seems that the aim of water companies will not be to ensure water quality and sewage treatment as a social good. After this blatant violation of access to water as an inalienable human right, over 3 million messages were sent to the members of the Parliament who stood against these measures (Save Greek Water, 2016).

#### 5. Consequences of water services privatization in indebted (and not only) countries

The global experience of privatization programs in water and sanitation services indicates that the private sector could not achieve the desired results. The privatization of water has led to several problems, mostly associated with increases in water tariffs, reduction in water quality, health problems, limited use of water supply, corruption and increases in government spending. Despite the catastrophic consequences for both the state and the citizens, lenders insist on keeping privatization of water services as a requirement in adjustment programmes. Below are listed examples of indebted countries with IMF/World Bank-imposed water privatization programmes.

In Ghana, the fault lied in the very first stage of the contract, which was very general and lenient toward the obligations of Aqua Vitens Rand Limited (AVRL). Specifically, AVRL invested nothing in the already poor state of the Ghana Water Company (GWC); noteworthy is that the state of the company was the reason for its privatization. Having failed to fulfil the arrangement to the end and by spreading falsehoods about the efficiency of their company, AVRL did not manage to reduce

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non-revenue water and improve water quality. Due to the consistently poor performance in six other target areas, the contract was rendered null and void (Remunicipalization tracker, 2017).

Another example is that of Maputo in Mozambique, where a 15-year contract ended prematurely in 2010, when the government bought back 73% of the water supply from the holding company, Fundo de investimento e Património do Abastecimento de Água (FIPAG). The partnership did not meet the contractual targets and obligations, since, after increasing water supplies, the volume of non-revenue water did not have the same outcome (Remunicipalization tracker, 2017).

In Tanzania, CWS company entered into a problematic contract with DAWASA, in 2003. Five months later, CWS stopped paying its monthly lease fee, resulting in a drop in the company's revenue by a third. This was due to the fact that new costumers did not register in the billing system, while the existing ones benefited from increased flexibility in making payments directly to the company's revenue collectors. After that, the government decided to terminate the contract prematurely (Remunicipalization tracker, 2017).

In Argentina, the contract was based on neoliberal recommendations and was considered as a flagship of privatization, worthy of replication by other countries. However, the private operator failed to comply with its contractual obligations and followed a strategy with the sole purpose of extraordinary profits, but Argentinean authorities turned a blind eye. This strategy was successful during the period of forced stability of the Argentinean currency (1993-2001), but imploded prematurely with the collapse of the neoliberal model in 2002 (Remunicipalization tracker, 2017).

In Uruguay, Obras Sanitarias Del Estado (OSE), the national public body who served as the provider of drink and wastewater services for the whole country and the private company URAGUA, who were tasked with the provision of water, had reportedly broken contractual obligations to renew and expand the water network. They also charged excessive service rates and connection fees that wide sectors of society could not afford. Services were of poor quality and even some public taps were disconnected (Remunicipalization tracker, 2017).

Noteworthy is that the negative results of water privatization are not limited to developing indebted countries that were forced to implement privatization policies, but also to developed countries that decided to privatize their water service companies for political and economic reasons. Various studies show that private water companies have been less efficient than the public sector even though they had access to better technology (Saal et al., 2007), they have caused environmental problems, they tend to overcharge their customers or raise the prices of household bills in order to open new sewerage facilities. According to a World Bank study, the increases in productivity that have been observed, with a simultaneous reduction in staff did not lead to a reduction in prices (Gassner et al., 2009). In most countries, private water companies invest less than the public enterprises for the maintenance and upgrading of the network (Castro and Heller, 2009); it is assumed, that in order for entrepreneurs to decide to invest, they expect that their investment will secure them a greater profit than the original cost, which in water services is not feasible (EPSU, 2012). It seems that, in all cases, water supply constituted a monopoly of certain companies, while in most cases no contest for the assignment of the project had taken place. The cases of Paris, Jakarta and Buenos Aires confirm the desire of companies to engage in joint ventures rather than compete with each other. Furthermore, in France and Italy some private companies have been convicted by the Commission for Protection of Competition for non-competitive behavior (EPSU, 2012). There have been several cases of deception of the public from private bodies trying to ensure a long-term profitable contract, at the public's expense. In several occasions, the companies Suez and Veolia have been accused of public officials' corruption, illegal contribution policy, bribe, price fixing, cartels' management and fraudulent accounting, such as in the case of Buenos Aires, France, Italy and the USA. According to a report from the Cour des Comptes (1997) - the National audit body in France, the system of privatization on which Suez and Veolia built their sovereignty, was routinely faulty: 'The lack of supervision and control from public services was aggravated by the lack of transparency of this form of management, and has led to abuses' (EPSU, 2012). In most cases, the terms of contracts, between the private and public sector, are confidential documents; hence, public accountability is impossible. In others, such as that of Buenos Aires, the terms of contracts were renegotiated repeatedly, with the purpose of ensuring more privileges and benefits to private companies at the consumers' expense. Another case is that of Berlin, where the Public Private Partnership (PPP) concession contract was kept secret and included a written guarantee of great profit. In 2012, the Federal Cartel Office ruled that the agreement violates German law on competition; therefore, the company was forced to reduce prices by 19% (EPSU, 2012). Thus, in many cases, the continuous growth in fees was not arbitrary, but the result of these negotiations. One of the main arguments for the transitioning from public to private sector is the earnings expected to be raised through the sale of the water company.

However, in fact, governments earn far less than the real value of these firms, especially in cases where the buyers know that the government is forced to sell the company, which appears to be a common phenomenon in countries where financial institutions are involved. In some cases, in which the purchases made at the state's desired price, the cost can possibly be transferred to consumers through raising prices. For instance, in France, private companies paid millions to obtain the water supply license; after completion of the transaction, the companies added an "entrance fee" on consumers' bill. Thus, the profits of the public sector were made at the expense of the consumers (Hall and Lobina, 2001). As a result, the countries are more likely to lose money even after selling part of their property, significantly decreasing their profits and rendering them unable to pay off their long term debts (EPSU, 2012).

## 6. Potential consequences of water services privatization in Greece

Taking into consideration the aforementioned examples, the consequences of water privatization in Greece are not expected to differ. First of all, since the beginning of the financial crisis, in Greece, the market value of public companies, and generally of all the public and private sector assets, has decreased substantially and it has fallen below the *objective value*. As a consequence, the revenues from the privatization of water companies will fall short of the ones that could be obtained in the pre-crisis period and they will not be able to cover a significant part of public debt. Moreover, potential buyers will try to downgrade even more the value of the companies, since they are aware that the Greek authorities are obliged to sell them. The selling price of the companies is not expected to increase through tendering, since the international experience has shown that international water companies prefer to engage in joint ventures rather than compete with each other. Even if the authorities put pressure for selling the companies at a certain price, it cannot be ensured that these costs will not be passed on to the consumers after the takeover of the company by the private sector. Ultimately, the water service companies are profitable and their sale will result in a loss of revenue for the government and difficulties in repaying public debt.

After privatization, the natural water monopoly that will be created, will allow private companies to demand monopoly prices, which will be substantially higher than the prices under perfect competition. Furthermore, the private sector's priority to make large profits goes hand in hand with price increases. This notion of private companies may have destructive ramifications on poor households, which do not have the ability to cope with high water prices compared to wealthier households (Tilch and Schmitz, 2013). Specifically, in Greece, the rise in water prices in combination with the economic crisis will increase the number of people who will lose their human right to have access to water and sanitation, as this was established by the United Nations on 3/8/2010 (A/RES/64/292) (UN, 2010). Global experience has shown that privatization does not bring in new investments. On the other hand, in cases where new investments were carried out, this entailed a dramatic increase in tariffs. Private companies will try to raise their profits by laying off the companies employees; immediately after the privatization, they will recruit them – since they have the necessary knowledge and skills, but with more flexible working conditions (Kallis, 2014). The customers should also be concerned about the quality of water that private companies provide, since the deterioration of water quality is an additional method private companies apply to restrict their operational costs. Moreover, the lack of financial motives and the weak supervision may lead to the indifference of the companies about the size of potential problems that customers may face (Tilch and Schmitz, 2013). The privatization of the country's largest water companies, EYATH and EYDAP, involves the risk of losing control on the decision making, regarding the country's water policies and planning. Private companies would be reluctant to promote water saving, since this would induce a decrease in sales (Kallis, 2014). Given the weak regulatory framework in Greece and the high rate of corruption, it is unlikely that the water privatization will ensure benefits for both the state and the people. Finally, the sale of these companies would result in a scandalous violation of the democratically expressed will of the Greek people, as it has been recorded at the Thessaloniki referendum on the 18th of May 2014 (Save Greek Water, 2016). After all, the negative effects of water privatization have already been noted by our European partner countries and lenders, which have turned to the remunicipalization of their water companies.

## 7. Conclusions

This paper examines the discursive strategy for water privatization that international financial institutions, such as the IMF and the World Bank, impose on indebted countries through conditionality. Evidence from water privatization projects around the world reveals increases in water prices, degradation of water quality, restrictions in water access. People of indebted countries often face the tragic trade-off dilemma between food, water, health and schooling (Alexander et al., 2001). Regardless of the devastating results of water privatization at both the social, economic and environmental level,

international financial institutions insist to turn a blind eye on such examples and continue to pursue a global privatization plan.

In Greece, the financial assistance offered, was combined with a commitment to implement a strict program of conditionality measures, which included the privatization of the two largest water and sewerage state companies. Despite the global trend of water remunicipalization, 'Troika' puts pressure on the Greek government to establish a public-private partnership in the water supply sector. Even after the strong opposition of citizens and unions and the State Council's decision, the privatization of water services remains a conditionality. Any attempts on privatizing water supply and sewerage in Athens and Thessaloniki is expected to have similar social and economic consequences to other indebted countries.

## References

- [1] Askitas, A., 2016. *What is the neoliberalism?* [Online]. Available at: <http://www.newsfish.gr/> [accessed 20/11/2016]
- [2] Alexander, N., Grusky, S. & Dossani, S., 2001. IMF and World Bank Push Water Privatization and Full Recovery on Poor Countries, *News and notices for IMF and World Bank watchers*, [Online]. 2 (4), Available at: [https://www.academia.edu/14256584/News\\_and\\_Notices\\_Vol.\\_2\\_No.\\_4\\_Spring\\_2001\\_](https://www.academia.edu/14256584/News_and_Notices_Vol._2_No._4_Spring_2001_) [accessed: 20/4/2017]
- [3] Asset Development Fund, 2016. Business development program, *The Official Gazette of the Hellenic Republic* (National Printing Office), Anderson Leal 2001. Free market environmentalism. New York: Palgrave
- [4] Bank Information Center, 2017. Why are international financial institutions important? *International Financial Institutions*, [Online]. Available at: <http://www.bankinformationcenter.org/resources/institutions> [accessed: 3/4/2017]
- [5] Bullard, N., 1999. G7 strengthens its grip on global economy. *Focus on the Global South*, [Online]. Available at: <https://focusweb.org/node/202> [accessed: 10/4/2017]
- [6] Castro, J., E. & Heller, L., 2009. *Water and Sanitation Services: Public Policy and Management*. London: Earthscan.
- [7] Common Ministerial Decision 206/25.4.2012
- [8] Council of State decision No 1906/2014, [Online]. Available at: [http://www.dsnet.gr/Epikairothta/Nomologia/ste%201906\\_2014.htm](http://www.dsnet.gr/Epikairothta/Nomologia/ste%201906_2014.htm) [accessed 12/12/2016]
- [9] ESM, 2017. [Online]. Available at: <https://www.esm.europa.eu/about-us> [accessed: 10/4/2017].
- [10] European Commission, 2010. The Economic Adjustment Programme for Greece. *European Economy, Occasional Papers* 61, [Online]. Available at: [http://ec.europa.eu/economy\\_finance/publications/occasional\\_paper/2010/pdf/ocp61\\_en.pdf](http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/pdf/ocp61_en.pdf) [accessed: 3/4/2017].
- [11] European Commission, 2015. Memorandum of Understanding 2015, Financial Assistance to Greece, *European Economy*, [Online]. Available at: [https://ec.europa.eu/info/sites/info/files/01\\_mou\\_20150811\\_en1.pdf](https://ec.europa.eu/info/sites/info/files/01_mou_20150811_en1.pdf) [accessed: 3/4/2017]
- [12] European Commission, 2017. EU Financial Assistance, [Online]. Available at: [https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance\\_en](https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-financial-assistance_en) [accessed: 2/4/2017]
- [13] European Public Service Union – EPSU, 2012. *Why water is a public service: exposing the myths of privatization*. London: Public Services International Research Unit (PSIRU).
- [14] Euro Summit, 2015. *Euro Summit statement of 12 July 2015*, SN 4070/15, [Online]. Available at: <http://www.consilium.europa.eu/en/policies/financial-assistance-eurozone-members/greece-programme> [accessed: 4/4/2017].
- [15] EYATH, 2017. *The Company*, [Online]. Available at: <http://eyath.gr/swift.jsp?CMCCode=060101&extLang=LG> [accessed: 3/4/2017]
- [16] EYDAP, 2017. *The Company*, [Online]. Available at: <https://www.eydap.gr/TheCompany/CompanyProfile/> [accessed: 3/4/2017]
- [17] Gassner K., Popov, A. & Pushak, N., 2009. Does private sector participation improve performance in electricity and water distribution? *PPIAF Trends and policy options*, No. 6, [Online]. Available at: <http://www.worldbank.org> [accessed: 10/1/2017]

- [18] Cour des Comptes, 1997. *La gestion des services publics locaux d'eau et d'assainissement*, [Online], Available at: <https://www.google.gr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwj2puO-y7HTAhWlfFAKHc6hBssQFggvMAE&url=https%3A%2F%2Fwww.ccomptes.fr%2Fcontent%2Fdownload%2F2841%2F28632%2Ffile%2FGestion-des-services-publics-eau-et-assainissement.pdf&usq=AFQjCNF1bG371Kk2jY1myh78Et6coXnGnA> [accessed: 20/4/2017]
- [19] Hall, D. & Lobina, E., 2001. *Private to Public: International lessons of water remunicipalization in Grenoble, France*. London: Public Services International Research Unit, University of Greenwich, [Online], Available at: [http://www.epoc.uni-bremen.de/publications/pup2001/files2001/Hall\\_Grenoble.PDF](http://www.epoc.uni-bremen.de/publications/pup2001/files2001/Hall_Grenoble.PDF) [accessed: 10/3/2017]
- [20] Hellenic Corporation of Assets and Participations, 2017. [Online], Available at: <http://www.hcap.gr/?q=en/content/mission-vision> [accessed: 19/4/2017].
- [21] IMF, 2016. IMF Lending, *IMF Factsheet*, [Online], Available at: <http://www.imf.org/About/Factsheets/IMF-Lending?pdf=1> [accessed: 9/4/2017].
- [22] IMF, 2017. *Lending by the IMF*, [Online], Available at: <https://www.imf.org/external/about/lending.htm> [accessed: 9/4/2017].
- [23] Kallis, G., 2014. 'Water is everyone's business.' *There are alternatives to privatization*. (in Greek), Kinissi 136, [Online], Available at: <http://www.136.gr> [accessed: 19/4/2017].
- [24] Law No. 2651/1998, Government Gazette 248/A/3.11.1998
- [25] Law No. 3986/2011, Government Gazette 152/1.7.2011
- [26] Law No. 4389/2016, Government Gazette 94/27.5.2016
- [27] Limperis, K., 2016. *The declaration on water, which the Prime Minister did not do, and the statement he finally made*. SEKES-EYDAP, [Online], Available at: <http://sekes-eydap.gr/η-δηλωση-για-το-νερο-που-ο-πρωθυπουργος> [accessed: 3/4/2017].
- [28] Petitjean, O., 2014. *Forced Privatizations in Greece: Suez Eyes Taking Over the Water Services of Athens and Thessaloniki*, Multinationals observatory, [Online], Available at: <http://multinationales.org/Forced-Privatizations-in-Greece> [accessed: 3/4/2017].
- [29] Remunicipalization Tracker, 2017. [Online], Available at: <http://www.remunicipalization.org> [accessed: 3/4/2017].
- [30] Saal D., Parker D. & Weyman-Jones, T., 2007. Determining the contribution of technical change, efficiency change and scale change to productivity growth in the privatized English and Welsh water and sewerage industry: 1985–2000. *Journal of Productivity Analysis*, 28 (1).
- [31] Save Greek Water, 2016. How the new Greek Super-Fund affects water services, [Online], Available at: <http://www.savegreekwater.org/archives/4582> [accessed: 3/4/2017].
- [32] Second Memorandum of Understanding, 2012. *Memorandum of Understanding on Specific Economic Policy Conditionality*.
- [33] SEKES, 2012. *Action against HRADF by EYDAP employees*. [Online], Available at: <http://sekes-eydap.gr/> [accessed: 9/4/2017].
- [34] <http://sekes-eydap.gr/> [accessed: 9/4/2017].
- [35] The Thistle, 2000. *The IMF and the WORLD BANK: Puppets of the Neoliberal Onslaught*, 13 (2), [Online], Available at: <http://www.mit.edu/~thistle/v13/2/imf.html> [accessed: 10/4/2017].
- [36] Tilch, R. & Schmitz, K., 2013. *EU's water privatization plans – Benefits and downsides of privatizing a public good*, Maastricht University, [Online], Available at: [http://agriwaterpedia.info/wiki/EU%27s\\_water\\_privatization\\_plans\\_%E2%80%93\\_Benefits\\_and\\_downsides\\_of\\_privatizing\\_a\\_public\\_good](http://agriwaterpedia.info/wiki/EU%27s_water_privatization_plans_%E2%80%93_Benefits_and_downsides_of_privatizing_a_public_good) [accessed: 2/4/2017].
- [37] United Nations, 3/8/2010 (A/RES/64/292). Resolution adopted by the General Assembly on 28 July 2010, 64/292. *The human right to water and sanitation*. Sixty-fourth, session Agenda item 48.

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## E-Commerce as Mechanism for Enhancing Micro and Small Enterprises: The Case of a Port Conurbated Area in the Southeast of Mexico

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### Abstract

E-commerce arised from the greater demand experienced by companies and the need of their administration to make better use of information technology and to find a better way to adapt the new technologies, in order to improve the relationship between customer and supplier. In this scenario, from micro to large interprises could benefit by developing e-commerce strategies; in the mexican context, micro, small and médium enterprises represent more tan 90% of business units but show low preference for adopting e-commerce strategies. Based on the above, this study aims to detect which elements appart small enterprises from e-commerce. After applying a survey among 100 small enterprises, it was observed that the most important barriers were the high cost of implementation, lack of qualified personnel and lack of information.

**Keywords:** e-commerce; micro enterprises; mexican SMEs.

### Introduction

Studies by the Organization for Economic Co-operation and Development (OECD, 1999) define e-commerce as the process of buying, selling or exchanging goods, services and information through communication networks. This represents a great variety of possibilities to acquire goods or services offered by suppliers in various parts of the world. With the development of this process, purchases of items and services online may become more attractive because of the ease of doing them, however, it is very important that cyber consumers take certain precautions to avoid being victims of fraudulent business practices.

Similarly, Fonseca (2014) states that electronic commerce deals with commercial transactions in which there is no physical relationship between the parties, but orders, information, payments, etc., are made through a electronic distribution channel (non-physical). Although there are other means of electronic commerce such as mobile e-commerce and interactive digital television that offer similar advantages, people focus on the Internet.

With the passage of time, this commercial modality has gone from being a simple catalog of products or services at the beginning of the nineties, built from an immovable page, with a little maintenance, to become one of the most indispensable means And important to make sales and generate profits.

E-commerce arises from the greater demand experienced by companies and the need of their administration to make better use of information technology and to find a better way to adapt the new technologies, in order to improve the relationship

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between customer and supplier. It is in this way that electronic commerce started in the business-to-business world more than four decades ago with the presentation of the Electronic Data Interchange (EDI), which was given among commercial firms, with the sending and receipt of orders, exchange of information, distribution and payment, etc. On the other hand, there is also consumer-to-consumer and consumer-to-consumer electronic commerce.

Also, Fallestein & Wood (2000) mention that electronic businesses have passed through four stages: presence in the network: with information content (1995-1996); Electronic shopping malls: (1996-1997) electronic catalogs; Electronic businesses: many companies were established (1997-1998); And digital economy: (1998 to date): interaction of systems of different organizations.

In the last ten years, e-commerce has registered a strong growth worldwide, both in quantity of users and number of commercial sites and certainly the investment advertising within the network; by its current volume, e-commerce can be considered as a mechanism for massive communication that thanks to its emergence is perceived as another way of understanding the market where the distance and the time are not obstacles and where client becomes an active consumer with a greater supply.

In this sense, the OECD (2012) stated in 2011 that in Mexico less than 5% of the population has bought some kind of product or service on the Internet. By percentage of net Internet buyers we can group Norway, England, the Netherlands, Denmark and Korea among the countries with the highest percentage of Internet users, because more than 50% of their population had bought online. With a percentage of the population between 30 and 20%, Iceland, Ireland, Belgium, Israel and Poland; with less than 20% of the population, are from Slovakia, Spain, Slovenia, Czech Republic and Estonia. Finally, the countries where less than 10% of the population had bought online were Hungary, Portugal, Italy, Greece, Chile, Turkey and Mexico.

Entering in the Mexican context, the director of Small and Medium Enterprises (SMEs) and Electronic Commerce of PayPal Mexico, Peón (2015) announced that e-commerce in Mexico had a value of 164 billion pesos and annually recorded a growth rate of 35%, which benefits SMEs by increasing their transactions. She also highlighted the growth in the number of online buyers in the country, since in 2011 reported 5.8 million and in 2014 totaled 9.6 million.

In addition, she pointed out that by the end of 2015, 10.9 million buyers are estimated, and that this figure might increase by 2016, reaching 12.1 million Mexicans who could purchase items online; also, announced that the best-selling items in 2014, were air tickets, clothing and accessories, followed by electronic, tickets for events, video games, applications, reservations for tourist packages and hotels, as well as books and magazines. Where SMEs showed greater growth in their Internet sales in the services sector, with an expansion rate of 20%; electronics, with 7.0%, and health and beauty with 6.0%.

Peon also indicated that mobile penetration has boomed in e-commerce, because of the "Millennial" generation (aged between 18 and 34) that leads mobility trends, with 88% of buyers via smartphones.

### **Advantages and disadvantages of electronic commerce**

E-commerce today is a reality and can be a very attractive alternative to expand the distribution channels of a company that offers consumer products. In this sense, Palomares (2015) emphasizes a series of advantages for the consumer when opting for this modality, among which they emphasize: access to more information; facilitates research and comparison of prices and products; lowers costs and prices; comfort, avoid travel and schedules; access to more diversity and information; promotes more competitive and cheaper markets; among other.

In addition to this, Arias (2015) points out that companies are also favored by being part of this market, as they can obtain some of the following benefits: their business are available 24 hours a day for 7 days a week; possibly greater discount on the product taking into account the diminishing cost of hiring sales personnel and the lower payment of the salaries; it is

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not necessary to have a physical store and invest in the decoration, screens, security and sanitation of the establishment; reducing the risk of misinterpretation in the circuit with the customer, and even with the supplier; easier access to new markets and customers, with little economic effort.

However, the competitive advantage of large companies to smaller ones is smaller because an efficient and attractive online shopping portal does not require a large financial investment, the customer chooses what gives him more confidence and greater service; ease of processing of the data transmitted by a customer relationship management (CRM) system, for example, preferences and form of payment of the clients, as well as allows the anticipation to changes in the tendencies of the market; the permanent contact with all the entities involved in the process, the interaction is faster, which reduces the costs related to communication; knowledge that is contained in the client's profile, habits and regularity of consumption, continuous availability of reports on which aspects are the most visited and which areas are most navigable; manufacturers can directly access the consumer market and therefore reduce intermediaries and increase their profitability; companies can internationalize their brands with much lower costs, without having to open physical stores (Arias, 2015).

However, problems may also appear. The causes of these problems are usually: customers fail to understand the whole buying experience. Even a product that is very well positioned in the market and with great value can fail if manufacturers and distributors do not understand the habits, expectations and motivations of consumers (e-commerce could lessen this potential problem with proactive and well-targeted marketing research). Another problem could arise from not considering the competitive environment: one enterprise may have the ability to build a good model of electronic bookstore business but not take into account the competition with other portals, or firms could be affected by the inability to provide feedback from the environment which could produce a coordination failure (underestimation of time requirements) (Arias, 2015).

In spite of these facts, the Internet is considered an effective sales channel that gives any size and type of business the opportunity to have a larger sales volume than in previous years. This is a strong reason why it is recommended that SMEs develop and strengthen the offer of electronic commerce. Besides, this means that every entrepreneur should see the Internet as a source of growth and alternative tool for their business. Getting involved in e-commerce is a great opportunity for companies to increase their sales levels in their products and services and represents itself as a great opportunity for small and medium-sized enterprises (SMEs) when they are concerned with all the aspects that are necessary to function correctly.

This is a way for SMEs to strengthen their offer through electronic commerce. The task for each company that wants to sell online is to invest in a good electronic channel that meets the quality requirements such as: site design, payment methods, product availability, security, ease of purchase, delivery options, Warranty and after-sales service.

However, SMEs in Mexico are not using this tool that would allow them to have additional income, in addition to helping to combat the current economic crisis. This is then analyzed in such a way that the problem of study can be identified.

### **Approach to the problem**

In spite of the great number of advantages that exist in the implementation of electronic commerce, as well as its rapid growth in the last decades, it is observed that there are still many limitations to be able to take advantage of the potential of this mechanism. Throughout the specialized literature on this subject, a number of factors are mentioned that affect the implementation of electronic commerce, among them, Weltevreden and Boschma (2008) affirm that the size of the company represents a limitation for them to be inserted in these practices, the smallest and medium being the least favored in this sense. On the other hand, Baptista (2000) and Mitchell (1992) emphasize that the seniority of companies is the most representative element for the adoption of electronic commerce, since those with more years in the market are more resistant to transit in this channel.

In the Mexican context, according to the National Institute of Entrepreneurs (INADEM), in *El Economista* (2013), reported that of the 73% of SMEs that have Internet access, only 10% sell online due to limitations on payment methods, reduced

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number of users and distrust of the systems. Another reason why smalls business are not using e-commerce as a growth strategy is by ignorance and myths about this online service, since you can launch a website with a small investment.

In order to offset the limiting factors mentioned above, greater financial education and promotion among SMEs are required to accept online purchases, therefore, a joint effort between authorities and private initiative is required to promote the use of electronic commerce between Mexican SMEs, recognized the National Institute of the Entrepreneur (INADEM) as well as the OECD.

According to data from the National Institute of Statistics and Geography (INEGI, 2015), in Mexico, in 2014 there were approximately 5.6 million business units, of which 95.4% were micro and small enterprises (MSMEs) that generate almost 20% of the Gross Domestic Product (GDP) and have a relevant role in providing employment in the country. Although the data is of impact, it is more that their sales have been practically achieved in a face-to-face market. And is that only 25% of these SMEs had Internet and only 10% a website.

One of the world's fastest-growing regions of the world is Latin America and the Caribbean, receiving 9.7% of global e-commerce in 2015, according to Internet World Stats (Conexión INTAL, 2015); also, in 2015, there were almost 110 million online consumers in this region.

So why is not the use of e-commerce implemented? According to Pueyrredon (2016), President of the Latin American Institute of Electronic Commerce, there are important barriers as the lack of products strategically designed for this market and an incipient culture to develop attractive mechanisms that improve customer experience.

Considering that SMEs represent more than half of the total companies in Mexico, this means that there is a great competitiveness and it is the duty of the organizations to be updated continuously so as not to collapse.

Based on the above, it is noticed that SMEs are not making use of this tool and are not only missing an opportunity for growth and introduction to new markets, but simply to remain remote in a broad competitive market. After identifying the problem experienced by SMEs in Mexico, related to the implementation of electronic commerce, the following question arises: What are the limiting factors that affect the adoption of electronic commerce in SMEs located at a port conurbated area in southeast of Mexico? Once the research question has been raised, the objective of this study is identifying the factors that have limited the adoption of e-commerce in SMEs in the mentioned area.

Based on the reports of the Economic Commission for Latin America and the Caribbean (ECLAC, 2013) and the World Trade Organization (WTO, 2012), the following hypotheses are proposed for this work:

Work hypothesis: the conditions for access to financing, the lack of qualified personnel and the distrust of the companies are the most influential factors in the adoption of electronic commerce in SMEs.

Null hypothesis: the conditions for access to financing, the lack of qualified personnel and the distrust of the companies are not the most influential factors in the adoption of e-commerce in SMEs.

### **Justification**

Great technological advances are transforming social and economic organization by bringing together millions of people around the world. In this new and more competitive environment SMEs should be better prepared and aware of the globalization that is being experienced and enter the electronic environment to obtain competitive advantages.

The supply and demand of goods and services in different markets, the structure of the market and competition in various sectors is affected by electronic commerce. In the short run, it is anticipated that the spread of electronic commerce will continue to reduce transaction costs and production costs, facilitate the incorporation of new companies into the markets and increase competition. All this, in turn, will lower prices, raise quality levels and create new and more diversified products, thus boosting economic growth and welfare.

As mentioned earlier, SMEs generate seven out of every 10 jobs in the Mexico, and generate 50% of GDP. Then it is necessary to identify why SMEs are not joining this growing market. Based on the above, it is shown the relevance of the development of this work.

### **Methodology**

The development of this study is based on a descriptive analysis which seeks to describe characteristics of a relevant groups and to calculate the percentage of units in a specific population showing certain behavior. Also, this is a cross-sectional work, since the collection of information from a given population sample happens just once. Given the characteristics of this work, a survey was designed as research instrument, considering the one presented in 2014 by the National Institute of Statistics (INE) of Spain, titled "Encuesta sobre el uso de TIC y comercio electrónico en las empresas 2014".

The study area selected for this study is the zone integrated by the cities of Veracruz and Boca del Río which constitute a port conurbated area in the southeast of Mexico. Due to the large number of SMES in the selected area, it was decided just to consider the ones related to the food industry; specifically, restaurants formally registered. The selection of these enterprises lies on the huge increase of business in this sector during last years, as pointed by Toledo (2014).

According to the Mexican Business Information System (SIEM), in 2015, in the State of Veracruz there were 39,722 companies in the commerce sector with less than 10 workers. Under this criterion, these can be classified as SMEs. Of these, 3,896 and 14,634 are located in the municipalities of Boca del Río and Veracruz, respectively. Together, they represent 18,530 productive units. However, official statistics do not give an accurate figure on how many of these are operating in the food subsector; This is a limitation to accurately identify the number that identifies our target population.

Based on the above, the technique of non-probabilistic sampling by quota was used, for convenience as it is easier to examine SMEs in terms of geographic proximity and access to information that is in the subsector food . In this way, a sample quota of 100 units was taken, divided equally between both municipalities; That is, 50 surveys were applied in each.

### **Results**

In this section, the analysis of the results of the 100 surveys applied in the municipalities of Veracruz and Boca del Río with their respective interpretation is presented.

According to the individuals surveyed, 28% of small and medium-sized companies have been operating for 3 to 4 years, which represented the highest percentage in the sample. Similarly, 26% reported having between 1 and 2. When analyzing the municipalities separately, 36% of the organizations surveyed in Boca del Río are of recent creation, having carried less than 1 year of operation.

Based on the responses of the respondents, who are in charge of SMEs located in Veracruz and Boca del Río, it can be observed that 91% of their businesses are not under the franchise model, this is a great disadvantage considering that a franchise could provide a rapid growth and reduction of risks and this would facilitate the implementation of electronic commerce as a tool. It can also be seen that the municipality of Boca del Río has the largest number of SMEs in franchise with 14%. Also, 60% of the organizations do not have other branches under their control, which can benefit from having more time and dedication to the branch with which they count, looking for new ways to grow their business, including electronic commerce.

Considering the means of communication used by the SMEs, it was reported tha 63%, do not have a fixed telephone line. Nowadays, a fixed line may not be seen as necessary, and for a small or medium-sized company it can be an extra cost, however, it can help in complementing the use of social networks and ordering and providing information through she.

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After analyzing the overall results of Veracruz and Boca del Rio, it can be seen that only 23% of respondents do not have electronic equipment as support in their business, the other 77% that is the majority. With them, this is a great advantage for the company as it can employ e-commerce through these support tools.

Similarly, most companies that do not have computer equipment reported that its high cost is the main obstacle, since many of them hardly have sufficient resources to maintain their operations, so they have trouble thinking about buying equipment that generates an extra income, this also has relation with the financing to which the owners or the companies themselves have access. The reality is that today, large companies are those with greater financing opportunities and lower interest rates, creating an obstacle for SMEs and preventing the collection of resources. Subsequently 38% of companies do not believe necessary the implementation of computer equipment, but the reality today is that there is a great competition between companies to survive and if companies can not adapt and innovate can fall. Only 14% of companies do not have electronic equipment because they do not know how to use them.

When it comes to Internet connection, it was noted that 76% of the small and medium-sized companies surveyed, which is the majority, have Internet at their premises and only 24% do not, nowadays it seems indispensable to have an Internet connection for creating a competitive advantage and increase income; also, it was noticed that 24% of organizations do not have an Internet connection and these should make an investment in a good Internet connection, which in the long run will generate many benefits. Aught, the great advances in technology are observed since before the majority of the users had Internet connection through cables and nowadays the majority of the SMEs (92%) have Wi-Fi connection.

To achieve success in a business you need to attract customers to him as it is what generates income. It is a very important variable to offer wireless Internet to your customers, as they are often influenced not to go for not offering it, what is observed is that 45% of companies that is almost half, do not offer free wireless Internet, which sounds necessary in the face of globalization. Besides, more than half (56%) of the studies SMEs do have software related to the practices of their business.

Most SMEs with 63% offer their services by electronic means, but this does not necessarily mean that they occupy e-commerce as a tool, but take advantage of social networks that are free to promote their products and even taking orders through them, without the need to invest in a page, which represents a benefit for them when increasing their sales, however, the disadvantage would be not being able to make payments online.

About the factors that limit the adoption of e-commerce, 41% of companies have not opted for electronic commerce due to the cost that this represents for their business,. But it also influences the financing provided by banks to these types of companies, since they offer them few financing opportunities and with very high interest rates compared to the large companies that benefit most. Also, 35% do not think it is necessary to implement this tool and there may be several factors to think this as seeing unnecessary invest in a page when there are free social networks where they can place orders and offer their products or simply the size or age of your company; moreover, 19% of companies do not have the necessary and trained personnel to carry out electronic commerce and only 5% do not use this tool because of mistrust, which is a subject that has been greatly improved thanks to the new privacy and data protection policies offered by websites.

Furthermore, 60% of companies use social networks to spread their business, which is a very good advantage, 26% have a platform that allows them to order their customers, 10% have a website to promote their company and only 4% have a portal for their customers to make payments online. So it is noticed that most SMEs use the internet and social networks as a tool to generate an extra income.

Also, 35% SMEs considered that the high prices to open an online sales page is the main limiting factor, 25% believe that the lack of qualified personnel is also a relevant factor by which they do not adopt e-commerce, 14% believe that it is the lack of information that is the determining factor and 10% that the lack of financing. Several factors prevent the use of electronic commerce as a tool, however, there are ways to combat or counter them, either through training or talks provided

by the government or banks, provide more information about prices, more financial support, better privacy policies, among others.

Either way, 70% of the managers and owners of SMEs are willing to receive training in e-commerce knowledge, in order to be informed and able to use this tool in the future that would allow them to increase their income. An 11% is not ready to receive training because they consider that their business is in the ideal form and is satisfied with it. While the other 19% do not know if they want to receive training for the knowledge of electronic commerce.

About the potential benefits and advantages produced by e-commerce pointed by SMEs, among the most notable are higher revenues with 34%, business profitability increases by 27%, customer knowledge with 18% and attracting new customers with 14%. Unfortunately, 76% of SMEs surveyed in the food sector do not have a mechanism to measure the impact on clients, which can be a great disadvantage since they will not be able to know Improvement or can get to know their customers in depth. Also, most attributed between 26% and 50% of their sales to the use of electronic commerce and the minority believed that it generates between 76% and 100% of their sales. Finally, it is noticed that most individuals look at e-commerce as a great strategic advantage for their business and 22% consider it not.

## Conclusions

The objective of the present study was fulfilled since the main factors that limited the adoption of the electronic commerce in the SMEs of the food sector in the conurbated zone Veracruz-Boca del Río were identified through surveys carried out to the different individuals; main factors detected were high prices, lack of qualified personnel and lack of information. The results were compared with existing articles and found matching factors, however, we must take into account that there are significant differences among countries..

In addition, the need for SMEs to implement e-commerce was identified, exposing the perception of SME entrepreneurs in the food sector in the Veracruz-Boca del Río area facing the factors that hinder the adoption of electronic commerce. It is clear that this tool in the food sector in the field of study could help to improve the economy, generate jobs, increase profits in small and medium enterprises, among other great advantages. Similarly, a large number of individuals in charge of SMEs are willing to receive training in e-commerce awareness; This represents an area of opportunity for the development of strategies that contribute to the insertion of these tools in the sector studied.

In addition to having an electronic page for online sales, it is advisable to have a mechanism that measures the impact on customers or if there is an increase considerable in the profits thanks to this tool. With this, a small and medium company can know if it is really worth investing in electronic commerce and if the money that is being invested in the page will be refundable in the short or medium term. Granting this set of tools would be a positive boost for SMEs and the local economy.

Notwithstanding the foregoing, it is necessary to address this issue from a broader perspective, in which other variables are included and focus on a larger sample, in order to obtain more precise results; However, it is considered that this exercise has provided valuable information that serves as a reference point in the study of this topic in the local context and from which support can be given to companies in the sector or others.

## References

- [1] Arias, A. (2015) Las nuevas tecnologías y el marketing digital. IT Campus Academy.
- [2] Baptista, R. (2000). Do innovations diffuse master within geographical clusters? *International Journal of Industrial Organization*, 18(3), 515-535.
- [3] Conexión INTAL. 2015. El comercio electrónico y la inserción de América Latina y el Caribe. Available at <http://www19.iadb.org/intal/conexionintal/2015/10/15/el-comercio-electronico-y-la-insercion-internacional-de-america-latina-y-el-caribe/>

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- [4] El Economista (7 de Agosto de 2013). *Pymes desaprovechan comercio electrónico*. Notimex. Consulted at: <http://eleconomista.com.mx/industrias/2013/08/07/ventas-linea-potencial-pymes-inadem>
- [5] ECLAC. 2013. *Perspectivas económicas de América Latina 2013: políticas de PYMES para el cambio estructural*. Available at <http://www.cepal.org/es/publicaciones/1463-perspectivas-economicas-america-latina-2013-politicas-pymes-cambio-estructural>
- [6] Fallestein, C. & Wood, R. (2000). *E-commerce*. Pearson Education. Prentice Hall.
- [7] Fonseca (2014). *Fundamentos del e-commerce: Tu guía de comercio electrónico y negocios online*. Versión digital. Recuperado de: [https://books.google.com.mx/books?id=flz9AgAAQBAJ&printsec=frontcover&hl=es&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](https://books.google.com.mx/books?id=flz9AgAAQBAJ&printsec=frontcover&hl=es&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false)
- [8] Instituto Nacional de Estadística y Geografía (INEGI). 2015. *Censos Económicos 2014. Datos relevantes de los resultados definitivos*. Available at [http://www.inegi.org.mx/saladeprensa/boletines/2015/especiales/especiales2015\\_07\\_5.pdf](http://www.inegi.org.mx/saladeprensa/boletines/2015/especiales/especiales2015_07_5.pdf)
- [9] Mitchell, W. (1992). Are more good things better, or will technical and market capabilities conflict when a firm expands? *Industrial and Corporate Change*, 1(2), 327-346.
- [10] OECD (1999). *Organization for economic cooperation and development. The social and economic impact of electronic commerce*, París, Francia.
- [11] OECD. (2012). *Perspectivas económicas de América Latina 2013*. OCDE/CEPAL
- [12] Palomares, R. (2015). *Merchandising. Auditoria de marketing en el punto de venta*. Madrid. ESIC.
- [13] Peón, A. (2015). *E-commerce y Millenials impulsarán pymes*. Diario Milenio. Available at [http://www.milenio.com/negocios/emprendedores/Comercio\\_electronico-millennials-paypal-ecommerce\\_0\\_500350080.html](http://www.milenio.com/negocios/emprendedores/Comercio_electronico-millennials-paypal-ecommerce_0_500350080.html)
- [14] Pueyrredón, M. (2016). *El problema para el e-commerce no está en la demanda, sino en desarrollar una oferta local*. Diario La República. Perú. Available at <http://larepublica.pe/economia/786887-marcos-pueyrredon-el-problema-para-el->
- [15] Toledo, J. (2014). *Los mejores nuevos restaurantes del 2014*. El Economista. Available at <http://eleconomista.com.mx/entretenimiento/2014/12/18/mejores-nuevos-restaurantes-2014>
- [16] Weltevreden, J.W.J. y Boschma, R.A. (2008). *The Influence of Firm Owner Characteristics on Internet Adoption BY Independent Retailers: A Business Survey*. *International Journal of Internet Science*, 3(1), 34–54.
- [17] WTO. (2012). *El comercio electrónico en los países de desarrollo, oportunidades y retos para las pequeñas y medianas empresas*. Available at [https://www.wto.org/spanish/res\\_s/booksp\\_s/ecom\\_brochure\\_s.pdf](https://www.wto.org/spanish/res_s/booksp_s/ecom_brochure_s.pdf)

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## Effectiveness of Health Information System Applications: Clinical Information and Diagnosis-Treatment Systems in Turkey

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### Abstract

The distinctive quality of the new social structure is that information becomes the only factor of production. In today's organizations, public administrators are directly responsible for applying information to administrative processes. In addition to his managerial responsibilities, a knowledge based organization requires every employee to take responsibility for achieving efficiency. This has increased the importance of information systems in the decision-making process. Information systems consist of computer and communication technology, data base management and model management and include activity processing system, management information system, decision support systems, senior management information system, expert systems and office automation systems. Information systems in the health sector aim at the management and provision of preventive and curative health services. The use of information systems in healthcare has the benefits of increasing service quality, shortening treatment processes, maximizing efficiency of the time, labour and medical devices. The use of information systems for clinical decision making and reducing medical errors in the healthcare industry dates back to the 1960s. Clinical information systems involve processing, storing and re-accessing information that supports patient care in a hospital. Clinical information systems are systems that are directly or indirectly related to patient care. These systems include electronic health/patient records, clinical decision support systems, nurse information systems, patient tracking systems, tele-medicine, case mix and smart card applications. Diagnosis-treatment systems are information-based systems used in the diagnosis and treatment of diseases. It consists of laboratory information systems, picture archiving and communication system, pharmacy information system, radiology information system, nuclear medicine information system. This study aims to evaluate the effectiveness of health information system applications in Turkey. The first part of the study focuses on the concept of information systems and the types of information systems in organization structures. In the second part, clinical information systems and applications for diagnosis-treatment systems in Turkey are examined. Finally, the study evaluates applications in the health sector qualitatively from the new organizational structure, which is formed by information systems.

**Keywords:** Healthcare, Information Systems, Clinical Information Systems, Diagnostic-Treatment Systems, Turkey Case.

### Introduction

One of the most important characteristics of the information society is that rapid developments in information and communication technologies force global organizations to change. Citizens are more likely to benefit from the educational opportunities and have expectations from the government for more service provision. The quality of the services provided by the public administration has increased. One of the key functions of the public sector is to effectively create information systems that take into account internal and external environmental conditions to enhance corporate performance. Information systems enable that information society monitor to closely developments at the global level. It shapes institutional politics. It provides a clearly flow of information between units. The strength of horizontal and vertical communications makes a positive contribution to institutional performance.

The performance indicators that public administrators will determine and in the strategic plans they prepare are used the data provided by the information systems. It is imperative that the public staff in the lower levels be informed of fundamental changes in public policy through the managerial information system in order to achieve their strategic objectives. The objectives of the public organizations are to receive opinions on service provision and quality from the target audience through a healthy information system. Information systems in this respect are one of the tools for the democratization of public administration.

This study focuses on the increasing importance of information systems with globalization. Information systems developed in the health sector, which is a semi-public service, are examined in Turkey. The purpose of the study is to evaluate the clinical information systems and diagnosis-treatment systems in Turkey by referring to the historical development of health information systems. The study is methodologically theoretical and is based on a literature review of qualitative analyses. Administrative information systems in health institutions are classified as activity processing system, management information system, decision support systems, senior management information system, expert systems and office automation system. In the second part; clinical information systems and diagnosis-treatment systems being applied in Turkey have been examined and evaluated in detail.

### **1- CONCEPT of INFORMATION SYSTEM and CLASSIFICATION**

An important characteristic of today's capitalist society is that formal knowledge becomes a personal and key economic resource. In organizational structures, the duty of non-physical workers is gaining importance and this is possible only when this information is applied to the work. Public administration is now a generic body of information society, responsible for the effectiveness of information which focused on the results (Drucker, 1993: 63-72). In a way, public institutions are to apply to information work, tools, products, processes, work design, and the information itself. Also; they should work to bring about innovation a systematic process by organizing for continuous change (Drucker, 2009: 78-81). Every organization in the information society has to be competitive globally with the internet spreading in the service sector. The public service policies focus on efficiency and productivity with the citizens' evaluations of the quality of public service. In this regard, the importance of information systems in storing, organizing and communicating information in a holistic sense is increasing. Analysing the problems, developing new products, evaluating the performances of the public personnel, determining the citizens' preferences, providing the internal and external communication within a organization are among the benefits of the information systems (Güleş and Özata, 2005: 36). The most important component of information systems is computer and communication technology. The second component of the information system is the database management. Database management provides storage, organizing and processing of data. The third component of the information system is model management. Model management includes persons and programs that produce information and process data stored in the database (Kavuncubaşı and Yıldırım, 2015: 426).

Health information systems enable each individual to obtain current and accurate information about health. With this system, individuals can easily access their own health information. All health-related data from birth to death are shared through a nationwide healthcare network (Ceylan, 2012: 4). Health information systems are the complete set of hardware, software and guidelines used for the production, transmission and effective use of all information related to the management and presentation of preventive and curative health services (Güleş and Özata, 2005: 89).

Health information systems are an old system. The first hospital to institutionally keep patient records is the Pennsylvania Hospital, which was founded in Philadelphia in 1752. The use of information systems in the modern sense for the clinical decision making and reduction of medical errors in the health sector dates back to the 1960s. The first systems developed concern billing and payments. In the 1970s, departments-based systems were developed to support clinical processes. With the 1980s, more information systems than managerial activities and business processes aimed to support health workers. Today, these systems aim to empower patients in the field of health (Van de Velde and Degoulet, 2003; Hollingworth and et al., 2007; Işık and Güler, 2010).

The development of Health Information Systems can be categorized as follows (Haux, 2006):

**1- Migration from Paper Based System to Computer Based System and Data Increase in Health Systems:** The paper based system in which transactions are executed and stored is abandoned. Transactions are now carried out via computers and data is stored in an electronic environment.

**2- Transition from Part-Based Health Information System to Organization Based, Regional and Global Based Health Information System:** The first applications of health information systems have been realized in certain departments such as laboratory, radiology systems. After the 1990s, hospital-based systems were transferred to regional and even global systems by integrating data from different health institutions.

**3- Health Information System Users can be Health Personnel and Administrators as well as Patients and Patient Relatives:** Computer aided informatics applications primarily aim to support physicians. Later on, nurses and other health personnel also entered the system. Today, the practices are widespread for citizens and patients in general.

**4- Expansion of Use of Health Information System Data:** Health information system data was used for patient care and administrative purposes in the 1980s. Today, these data are also used in clinical and epidemiological studies.

**5- Transition from Technical Knowledge Management to Strategic Knowledge Management:** Until the 1990s, technical problems experienced in computer-aided information systems were considered. However, with the use of these systems, problems related to organizational changes, social issues, change management and strategic knowledge management in the long run have come to the fore.

**6- Incorporation of New Data Types:** By the 1990s it became possible to store images such as film, MR as well as alpha-numerical data. Today, it is also possible to store data at the molecular level (DNA, Protein Data).

**7- Emergence of New Technologies:** The functionality of computer-aided information systems has increased steadily. Thanks to the latest technologies, it is possible to collect data continuously from the patients.

The benefits of information systems in health institutions can be listed as follows (Zafar, 2005):

- Providing the necessary data during the examination
- Contributing to the medical decision-making process
- Provide support for patient education and preventive health care applications
- Facilitating the filing process, organizing intensive workflows, increasing patient satisfaction
- Helping care of the patients at a distance, reducing the costs of health care
- Better coordination of health care delivery by strengthening communication between patients and health workers

Attention should be paid to some points in the structuring of information systems in health institutions: Information systems should be integrated with internal and external systems. Patient information should be provided at the desired time and place. Confidentiality and security of data must be observed. Patient management process should be controlled effectively. Decision making in management and patient care should be enhanced. Revenue leaks should be avoided. The usefulness of information for audit and research purposes should be assessed (Herbst, et al., 1999: 308).

Information systems used in health institutions can be grouped into two main groups as clinical information, diagnostic treatment systems and administrative information systems. A wide variety of Managerial Information Systems are used in health institutions. These are Activity Processing System, Management Information System, Decision Support Systems, Senior Management Information System, Expert Systems and Office Automation System. Activity processing systems are a data collection system. It provides taking programmatic decisions and operational control. The management information system is often used for administrative control and provides information to the mid-level managers. This system is computer based. It regulates information production and information flow in the institutions. Decision support systems are used to solve unprogrammed problems in health care institutions. The senior management information system provides senior managers with the information they will use to monitor activity results or general operating conditions. Expert systems often

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include computer applications that enable unidentified tasks to be performed. Office automation system is used in daily communication and information processing activities in offices and administrative units (Kavuncubaşı and Yıldırım, 2015: 427-431). In the following section, clinical information and diagnosis-treatment systems are examined in Turkey.

## 2- Development of Clinical Information Systems in Turkey

The largest organization using information systems in Turkey is the Ministry of Health, where 65% of the hospitals in the country are affiliated. Initiatives to establish information systems in the field of health began in the 1990s to pass the Health Information Systems Project, which was jointly organized by the ministry and the World Bank. This project followed the second health project funded by the World Bank and Turkey, covering 1995-2001. The Health Information Systems Project started in 1992 with the planning phase. At this stage, problems related to the quality and information validity of the hospitals were evaluated. Information systems have a 20-year history in Turkey. In the health sector, the use of information systems has been made compulsory in some sense with efficiency-based reforms based on cost-benefit analysis (Dağlı, 2011: 11-14). For this purpose, the General Directorate of Health Information Systems established in 1996 has attained a contemporary structure with the decree of law published in 2011. The General Directorate of Health Information Systems is responsible for spreading the use of health information systems throughout the country. It is responsible for establishing the Ministry of Health's Information Systems. It follows the development of informatics technologies in the world and carries out national and international relations in the field of health (T.C. Resmi Gazete No. 663, article 11, [www.resmigazete.gov.tr](http://www.resmigazete.gov.tr), 12.04.2017).

Clinical Information Systems are a system directly related to patient care. It provides the creation, storage and reuse of necessary information to support patient care. These systems support diagnosis and treatment services. It makes it easier for physicians to take clinical decisions more effectively. With Clinical Information Systems, improvements have been made in the health sector such as the elimination of disease causes, the development of qualifications, the reduction of medical errors, and the increase of the productivity of health personnel (Demirel, 2013: 69). Clinical information systems used in health institutions include many different information systems. These systems see the function of gathering, processing, storing and transmitting all kinds of information in picture, text, image and audio format and they are used in the decision making process (Austin and Boxerman, 2013: 167).

Clinical Information Systems reduce the in-service waiting times of patients. It facilitates communication between patient care-servers and doctors. It provides the development of standards for the diagnosis and treatment process. The information gathered in the Clinical Information Systems is well organized. These systems improve drug dosing. They reduce adverse side effects of drug interactions. However, the infrastructure of clinical information technology is costly. There are great concerns about the confidentiality and preservation of patient data in the computer system. Integration of old systems into clinical information systems can also take time (Raymond and Dold, 2002: 1-7).

### 2.1. Patient Files

It is a collection of documents that contains information obtained from studies conducted in relation to diagnosis and treatment of patients. These information and documents relate to the diagnosis and treatment of patients and injured persons during their stay in the health institutions. The first step in the development of clinical information systems is the regular keeping of patient files (Kavuncubaşı and Yıldırım, 2015: 441).

### 2.2. Electronic Health/Patient Records

It ensures that all information about the patient is collected and used in the computer environment. This system requires that electronic medical records belonging to the patient should be in full, useful, effective, ethical and legal manner. It allows all records acquired over time to be stored in a holistic way (Blobel, 2001: 81). Thus, health staff reaches different

information sources in less time and at lower cost. Thanks to the system, reliable information can be easily obtained by scanning and filtering medical information (Küyük et al., 2005: 3-14).

### 2.3. Clinical Decision Support Systems

Clinical decision support systems are computer programs that provide support to clinicians or other health care staff in clinical decisions. These systems are computer systems that are interested in clinical data or medical information to provide a decision support (Eneida, 2004: 591). These systems are designed to help doctors who make decisions by providing the most up-to-date informations. Clinical decision support systems are divided into passive and active: Passive clinical decision support systems are an information system that collects, organizes and provides information to the physician for patient information.

The main purpose is to provide direct information on the subject. The active clinical decision support system combines medical information or medical science with patient information. It gives various suggestions to physicians in decision-making process (Kavuncubaşı and Yıldırım, 2015: 445-446). By means of this system, mistakes due to negligence in health are prevented and possible side effects of drugs are eliminated by avoiding wrong drug usage (Özata and Aslan, 2004: 16-17).

### 2.4. Nurse Information Systems

Systems in which information and communication technologies operate on fields and processes related to nursing services. It allows the nursing tasks to be done easily and quickly (Saba, 1997: 59), such as assessment, monitoring, identification of the nursing aspects of the disease, preparation, presentation and analysis of health care plans., The nurse informatics which was recognized as a new field of specialization by the American Nurses Association in 1992, it provides a decision support system for nurses in nursing practice, nursing process, development of phases through the data management (Erdemir, 2008). By using information technology in nursing services, workload and error rates have decreased. Communication between the nurse and the patient has been strengthened (Chang et al., 2011: 332-340).

### 2.5. Patient Monitoring Systems

It is the system in which the patients who apply to the health institutions and organizations can follow the treatment in the hospital and after the discharge, the treatment results are evaluated and the healing process can be monitored. Thanks to these systems, the frequency of patients' referral to hospitals and the success rates of the treatments applied are clear. Hospital performance and quality-focused health services are evaluated with patient satisfaction by monitoring patients with developing mobile technologies (Tan et al., 2009). This system, also known as the intensive care unit, is equipped with specially trained medical personnel along with high-tech medical devices, which are distinguished from other hospital services in terms of medical treatment and patient care. Patient monitoring systems can follow vital signs such as heart rate, blood pressure, respiratory rate, and body temperature from the monitor (Ömürbek and Altın, 2009: 215).

### 2.6. Telemedicine

Telemedicine is a method of providing physiological signals for the diagnosis, treatment, follow-up and evaluation purposes between physicians and patients in different places (Ganapathy, 2005: 851). Telemedicine applications include the ability to perform remote operations using information systems and communication technologies aimed at conducting health-related researches (Işık and Güler, 2010: 2). Telemedicine in Turkey is one of the projects that the Ministry of Health has dealt with in the context of e-health applications. This project was used in the first stage in the form of health service presentation in the field of radiology and pathology. Some of the current tele-medicine applications are (Demirel, 2013: 77-81):

✓**Tele-Radiology:** Radiological images and related information are sent electronically from one place to another and interpreted or consulted.

✓**Tele-Pathology:** It is the process of transferring images via telecommunication methods for diagnosis, consultation and training.

✓**Tele-Cardiology:** It refers to the remote collection of all cardiologic data such as ECG, echocardiography, heart rhythms, pictures and sounds, and then transfer to a service center.

✓**Tele-Surgery:** The surgeon who is not in the place of operation and he remotely controls and performs the surgery with a surgical robot (Rayman, 2009: 8).

✓**Tele-Care (Health Care at home):** With Tele-Care, video cameras are located in the patients' homes for remote diagnosis and treatment without going to the hospital. In Turkey, the Ministry of Health has begun to provide home health care services for some diseases since February 2010. It includes phototherapy practices for new-borns (0-1 month old), respiratory system diseases as "Chronic Obstructive Pulmonary Disease", bedside patients, terminal period palliative care patients, advanced muscle diseases (Akça, 2013: 169).

## 2.7. Case Mix

Case Mix, Health Management Information Systems, provide links and balance between the clinical aspects of health care services and the financial aspects of budget and policy development activities. It categorizes the health system outcomes and the conditions of the patients by grouping them according to similar characteristics in a clinically and economically meaningful way. The system consists of diagnostic groups and information systems with similar financial management (Ömürbek and Altın, 2009: 216; Güleş and Özata, 2005: 116).

## 2.8. Virtual Reality

A virtual reality is a simulation created using computer graphics, sounds, and other sensors that have a real world-like appearance and interact with the user (Gregg, Tarrier, 2007: 343). In the fields of basic medicine education, such as anatomy, physiology, biochemistry, virtual reality applications are utilized. It is used in computer processing of data obtained for training, diagnosis and treatment in medicine. It allows different medical procedures to be supported by other medical information and methods (Özkurt, 2003: 55).

## 2.9. Smart Card Applications

It is not enough to store medical records only in the computer environment. It is also important that medical information can be accessed at the desired location and in the right way when needed. One of the methods developed in this regard is smart card applications. In this application, the patient can take his medical history with him everywhere and present it at the time of consultation (Müldür, 1999: 8; Kardas and Tunali, 2006: 66-67). Smart cards have advantages such as high memory capacity, identification of the cardholder, waterproofing, and readability without the need for a computer and quick access to the medical history of the patients (Rosli et al., 2009: 136). In Turkey, studies are being carried out for the transition to smart card system. Thus, pharmacists will be able to see the hospital where the patient comes, doctor, written prescription via smart medical cards.

## 3. Evaluation of Diagnosis-Treatment Systems in TURKEY

Information-based systems and equipment used in the diagnosis and treatment of patients are generally referred to as diagnosis and treatment systems. These systems come from other applications with imaging and laboratory diagnostic systems that support the diagnosis and treatment process (Güleş and Özata, 2005: 131).

### 3.1. Laboratory Information System

The laboratory information system was prepared by considering all the information management needs of the hospital laboratories. With the system, the information processing process is controlled easily and effectively and the system provides a faster and more efficient workflow (Sümen et al., 2005: 103). The laboratory information system supports the laboratory's functions of collecting information, verifying and reporting the test results. Laboratory tests required for patients are requested via outpatient clinics or other units, and results from automated laboratory equipment are delivered directly to the service units in hospital. In addition to analysing and reporting functions of laboratory information systems, it is also

used in the acquisition of analysis requests, ordering and planning necessary resources for these analyses (Kavuncubaşı and Yıldırım, 2015: 447).

### **3.2. Picture Archiving and Communication System (PACS)**

PACS systems make it possible to archive images in different units within a place. It is an electronic film archiving system that allows digital images to be served to users at different points when necessary (Ulaş and Tatar, 2005: 245). The system has beneficial aspects for hospitals and patients. It has reduced film costs for hospitals. It provides convenience in the archiving system. Millions of images can be stored in a disc without any deformation. For patients, however, the risk of loss and deformation of the films is ended. Patients do not have to carry a film when they go to the physician's control. If necessary, the patient's data can be sent to medical centers abroad. The patient's previous images and his later images after years can be successfully compared (Güler, 2008: 74-76).

### **3.3. Pharmacy Information System**

Pharmacy Information Systems include drug use, drug stock and management activities in patient care. These systems support treatment services besides pharmacy activities (Demirel, 2013: 70-71). The pharmacies are particularly among the departments that use the most information in the hospitals. The Pharmacy Information System examines patient prescriptions. The system follows medications given to the patient. It warns health staffs about the effects and side effects of medicines (Kavuncubaşı and Yıldırım, 2015: 447).

### **3.4. Radiological Information System**

Radiology information systems can take automatic images from the radiology system. It can transfer bi-directional digital information to hospital information system. It also carries out the data transfer of the radiotherapy planning information with the patient's appointment, examination, diagnosis information in the clinic. It has also the ability to archive data (Akman, 2005: 4).

### **3.5. Nuclear Medical Information System (NMIS)**

Nuclear Medicine is a scientific discipline that uses radioactive substances to diagnose and treatment processes. The Nuclear Medicine Information System has versatile functions ranging from the entry and changing of nuclear medicine requests to appointment planning and the entry of patients' information. In addition, it provides follow-up of the film recordings. It provides the preparation of radiology reports and performs the function of transmitting information to existing patient information systems (Bayraktutan et al., 2010: 14).

### **3.6. Electronic Document Management System**

It enables to transfer the Ministry of Health's documents and information exchanges to electronic environment. The system aims to manage this information instantly over the internet. Document management is a discipline that ensures that documents are controlled and regulated by standard rules in health institutions. It also standardizes processes related to internal and external correspondence (T.C. Sağlık Bakanlığı, [www.saglik.gov.tr](http://www.saglik.gov.tr), 09.04.2017).

The advantages of electronic document management system are as follows (Güler, 2008: 36):

- It increases document security
- Quality of service is increasing with easily sharing of documents
- A copy of the archive is easily created elsewhere
- The archive area is shrinking. As a result, archive costs are decreasing
- Staff mistakes are decreasing. The accuracy rate of existing information is increasing

- The costs of copying documents, faxing, sending by courier are reduced

## Conclusion

Information has become a major factor in production in the post-industrial period. The importance of communication between the administrative units has increased in the structure of the organization. The quality of the human capital appears to be decisive on the organizational performance. Information workers are in a central position in the service sector, both institutionally and personally. In this respect, the creation of in-house information systems through effective use of information and communication technologies is necessary to improve the quality of public services. Information systems have significant benefits in solving intra-organizational problems, evaluating citizen requests, and providing horizontal and vertical communications within the organization. Administrators can easily make strategic decisions about public institutions by using the data of information systems. Health information systems play an important role in the management and presentation of preventive and curative health services. Information systems are used for the production, transmission and efficient use of information related to the health field. Information systems in the health field have been used effectively since the 1960s. In the 1970s, systems for various units in health institutions were developed. Since the 1980s, information system applications have been widespread which will enable the health staff to work quickly, efficiently and effectively. At the same time, it is aimed that the citizens benefit from health service provision in a short time with less cost. Following the global technological developments in the health sector, especially in the development of information systems will increase patient satisfaction. Information systems offer a better coordination terms institutionally. It regulates intensive workflows of healthcare providers. It offers a competitive advantage in the health sector with increasing quality in institutional service delivery.

Information systems in health institutions are classified as clinical information, diagnosis-treatment systems and management information systems. Management information systems are more concerned with the effectiveness and control of in-house information flows. In the study, clinical information and diagnosis-treatment systems have been examined in Turkey. Initiatives for the establishment of health information systems in Turkey started in the 1990s with the "Health Information Systems Project" funded and coordinated by the Ministry of Health and the World Bank. The Ministry of Health has actively implemented projects and studies on information systems in the health care system, especially after 2000's, with a radical modernization. Clinical Information Systems have provided the direct renewal of patient care processes on the basis of quality orientation. For this purpose patient files have been converted into electronic patient record form. Current developments in the field of healthcare have been presented to physicians with clinical decision support systems. With nurse information systems, it is becoming possible for nurses to learn the current information about the patients instantaneously, and the nurses are more interested in the problems of the patients. Patient monitoring systems allow patients to be closely monitored during treatment and after treatment. The success rate of the treatment method applied with this system is clearly observed. Tele-medicine applications have enabled actively the flow of information between physicians and patients in different locations. It is especially convenient for the patients to provide health care services at home. Similar patient profiles are grouped together by the case mix application. It is a clinically and economically useful application. Virtual reality applications have increased the productivity of basic medical education, diagnosis and treatment processes through simulations. Turkey has not yet passed the smart card application. However, the necessary works are being carried out urgently to move to this service which enables the patient to access the medical places and information at the desired place and time.

Diagnosis and treatment systems have increased the ability to make accurate decisions in the diagnosis and treatment processes. One of these systems, laboratory information systems collects information from laboratories, verifies existing information and reports test results. With the picture archiving and communication system, digital images can be presented for the evaluation of users in different units. Pharmacy information systems are useful in regulating patient prescriptions, following daily doses of medications, and identifying side effects of medications. The radiology information system automatically transfers images from the radiology system. With the Nuclear Medicine Information System, preparation of

radiology reports has become easier. The electronic document management system is an important institutional tool for storing, sharing and transmitting documents within electronic environment. Thanks to the system, document security is increased and the institutional archive space is narrowed. With the reduction of red tape, the cost of service has decreased and the quality of the service provided has increased. When assessed in general, it can be predicted that the efforts of the health sector to activate the health sector through information and communication technologies will be increased in order for Turkey to adapt to global competition conditions. One of the indispensable requirements of the information society is the citizen-focused effective provision of public services in a way that is based on continuous progress and development.

## References

- [1] Akça, Nesrin (2013), "E-Sağlık", **Sağlık Kurumlarında Bilgi Sistemleri** (Edt: Ali Yılmaz), Anadolu Üniversitesi Web-Ofset, Eskişehir, ss.159-189.
- [2] Akman, F. (2005), "Radyoterapi Bilgi Yönetim Sistemi (RTIS)", Dokuz Eylül Üniversitesi Radyasyon Onkolojisi Anabilim Dalı Ders Sunusu, İzmir.
- [3] Austin Charles, Boxerman Stuart (2013), **Information Systems for Healthcare Management**, Eighth Edition, Health Administration Press, USA.
- [4] Blobel, Bernd (2001), "Hospital Information Systems in Today's Healthcare", World Markets Series Business Briefing, **Hospital Engineering&Facility Management**, December, pp.80-83.
- [5] Bayraktutan, Yusuf, İbrahim Arslan, Vedat Bal (2010), "Sağlık Bilgi Sistemlerinin Hastane Performansları Üzerine Etkisinin Veri Zarflama Analiziyle İncelenmesi: Türkiye'deki Göğüs Hastalıkları Hastanelerinde Bir Uygulama", **Gaziantep Tıp Dergisi**, Cilt: 16, Sayı: 3, ss.13-18.
- [6] Ceylan, F. (2012), Hastane Bilgi Yönetim Sistemleri Ders Notları, Uludağ Üniversitesi, Sağlık Hizmetleri Meslek Yüksekokulu, Bursa.
- [7] Chang, I., Hwang, H. G., Hung, M. C., Kuo, K. M., Yen, D.C. (2009), "Factors Affecting Cross-Hospital Exchange of Electronic Medical Records", **Information&Management**, 46, pp.109-115.
- [8] Demirel, Ahmet (2013), Sağlık Hizmetleri Yönetiminde Sağlık Bilgi Sistemleri ve Kullanım Modülleri, Beykent Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmamış Yüksek Lisans Tezi, İstanbul.
- [9] Dağlı, Duygu (2011), Streamlining a Hospital Information System, The degree of MBA unpublished and a thesis submitted to Middle East Technical University, Ankara.
- [10] Drucker, Peter (1993), **The Post-Capitalist Society**, Harper Collins, New York.
- [11] Drucker, Peter (2009), **Managing in a Time of Great Change**, Harvard Business Review Press, USA.
- [12] Eneida, A. Mendonça (2004), "Clinical Decision Support Systems: Perspectives in Dentistry", **Journal of Dental Education**, June, pp.589-597.
- [13] Erdemir, Firdevs, "Hemşirelik Bilşimi: Dünyada ve Ülkemizde Durum", [http://www.turkhemsirelerderneği.org.tr/files/makaleler3/hemsirelik\\_bilisimi.pdf](http://www.turkhemsirelerderneği.org.tr/files/makaleler3/hemsirelik_bilisimi.pdf), 28.06.2008.
- [14] Güler, Filiz (2008), Hastanelerde Elektronik Doküman Yönetimi, Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, Yayınlanmamış Yüksek Lisans Tezi, İstanbul.
- [15] Güleş, Hasan Kürşat, Musa Özata (2005), **Sağlık Bilşim Sistemleri**, Nobel Yayın Dağıtım, Ankara.
- [16] Ganapathy, K. (2005), "Telemedicine and Neurosciences", **Journal of Clinical Neuroscience**, Vol.12, I.8, November, pp.851-862.
- [17] Gregg, L., Torrier, N. (2007), "Virtual Reality in Mental Health: A Review of the Literature" **Social Psychiatry and Psychiatric Epidemiology**, 42 (5), pp.343-354.
- [18] Haux, Reinhold (2006), "Health Information Systems-Past, Present, Future", **International Journal of Medical Informatics**, 75, pp.268-281.
- [19] Herbst, Kevin, Littlejohns P., Rowlinson, J., Collinson, M., Wyatt, J. C. (1999), "Evaluation Computerized Health Information Systems: Hardware, Software and Human Ware Experiences from the Northern Province South Africa" **Journal of Public Health Medicine**, 21, 3, pp.305-310.

- [20] Hollingworth, W., Devine E. B., Hansen R. N., Lawless N. M., Comstock B. A., Wilson-Norton J. L., Tharp K. L. and Sullivan, S. S. (2007), "The Impact of e-Prescribing on Prescriber and Staff Time in Ambulatory Care Clinics: A Time-Motion Study", **Journal of the American Medical Informatics Association**, 14, pp.722-730.
- [21] Işık, Ali, Hakan, İnan Güler (2010), "Tele Tıpta Mobil Uygulama Çalışması ve Mobil İletişim Teknolojilerinin Analizi", **Bilişim Teknolojileri Dergisi**, C.3, S.1, ss.1-10.
- [22] Kavuncubaşı, Şahin, Selami Yıldırım (2015), **Hastane ve Sağlık Kurumları Yönetimi**, Gözden Geçirilmiş ve Yenilenmiş, 4. Baskı, Siyasal Kitabevi, Ankara.
- [23] Kardas, G., Tunali, E. T. (2006), "Design and Implementation of a Smart Card Based Health-Care Information System", In: **Computer Methods and Programs in Biomedicine**, Vol.81 Issue: 1, pp.66-78.
- [24] Küyük, Ayşe, Aslan Kaplan, Ali Yılmaz (2005), "Elektronik Sağlık Kayıt Sistemlerinin Kütüphanelerle Bütünleştirilmesi", **Bilgi Dünyası Dergisi**, C.6, S.1, ss.3-14.
- [25] Müldür, Serdar (1999), Türkiye Devlet Hastanelerinde ve Devlet Hastaneleri Arasında Hasta Kayıtlarının Elektronik Paylaşımını Kullanım Modeli, Gazi Üniversitesi Fen Bilimleri Enstitüsü, Yayınlanmamış Doktora Tezi, Ankara.
- [26] Özkurt, Ahmet (2003), "MEDVR: Tıpta Bir Geliştirilmiş Gerçeklik Uygulaması ve Başarıyı Etkileyen Faktörler", **DEÜ Mühendislik Fakültesi Fen ve Mühendislik Dergisi**, C.5, S.3, ss.55-68.
- [27] Ömürbek, Nuri, Fatma Gül Altın (2009), "Sağlık Bilişim Sistemlerinin Uygulanmasına İlişkin Bir Araştırma: İzmir Örneği", **SDÜ Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi**, Sayı: 19, ss.211-232.
- [28] Özata, Musa, Şebnem Aslan (2004), "Klinik Karar Destek Sistemleri ve Örnek Uygulamalar", **Afyon Kocatepe Üniversitesi Tıp Dergisi**, C.5, S.1, ss.11-17.
- [29] Rayman, R. (2009), **Robotic Tele-Surgery: An Investigation of Utility Human Adaptation and Performance**, The University of Western Ontario, Doctor of Philosophy (PHD) Thesis, Canada.
- [30] Raymond, Briand and Deld Cynthia (2002), **Clinical Information Systems: Achieving the Vision**, Oakland, CA: Kaiser Permanente Institute for Health Policy.
- [31] Rosli, R. M., Taylor, D. M., Knott, J. C., Das A., Dent, A. W. (2009), "Health Smart Cards: Differing Perceptions of Emergency Department Patients and Staff", **Australian Health Review**, 33 (1), pp.136-143.
- [32] Saba, Virginia K. (1997), "A Look at Nursing Informatics", **International Journal of Medical Informatics**, Vol. 44, pp.57-60.
- [33] Sümen, Esra, Neşe, Zayim, Osman Saka (2005), "Laboratuvar Bilgi Sistemi (LBS) Uygulaması: Benimseme ve Kullanıcı Memnuniyeti", **İkinci Ulusal Tıp Bilişimi Kongresi**, Antalya, ss.102-107.
- [34] T.C. Sağlık Bakanlığı, [www.saglik.gov.tr/EBTS/belge/1-16389/elektronik-belge-yonetim-sistemi-nedir.html](http://www.saglik.gov.tr/EBTS/belge/1-16389/elektronik-belge-yonetim-sistemi-nedir.html), (09.04.2017).
- [35] T.C. Resmi Gazete, 663 Sayılı KHK Madde 11, <http://www.resmigazete.gov.tr/eskiler/2011/11/201111002M1-3.htm>, (12.04.2017).
- [36] Tan, Osman, İlker Korkmaz, Okan Gidiş, Sercan Uygun (2009), "Hasta Takip Sistemlerinde RFID Uygulaması", **Akademik Bilişim' 09, XI. Akademik Bilişim Konferansı Bildirileri**, 11-13 Şubat, Harran Üniversitesi, Şanlıurfa, ss.99-105.
- [37] Ulaş, Mustafa, Yetkin Tatar (2005), **Medikal Görüntülerin Sayısal Ortamda Arşivlenmesi**, **Biyomedikal Mühendisliği Ulusal Toplantısı**, İstanbul, ss.242-247.
- [38] Van de Velde, Rudi and Degoulet, Patrice (2003), **Clinical Information Systems: A Component Based Approach**, Springer-Verlag Inc., New York.
- [39] Zafar Atif (2005), **Getting Started with Health IT Implementation**, Retrieved April 9, 2017 from [http://archive.healthit.ahrq.gov/portal/server.pt/gateway/PTARGS\\_0\\_890483\\_0\\_0\\_18/Health%20IT%20Implementation-ppt](http://archive.healthit.ahrq.gov/portal/server.pt/gateway/PTARGS_0_890483_0_0_18/Health%20IT%20Implementation-ppt).

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## Entrepreneurial Culture and Financial Education Between Students of the Veracruzana University, Veracruz Region

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### Abstract

Entrepreneurial culture and financial education stand out as two fundamental issues on the international agenda, since these elements are considered in favor of the efficient use of financial resources, as well as the identification of opportunities for the development of self-employment projects, contributing to local economic growth. According to the National Commission for the Protection and Defense of Financial Services Users (CONDUSEF, 2012), financial education can be defined as the set of actions that imply learning to manage money better, being foresighted, consuming in a rational way, and learn to invest, know how to take care of your assets and use financial products and services with responsibility. Similarly, Smyth (2011) points out that financial education is the process by which consumers improve the understanding of financial products and acquire a greater understanding of financial risks and market opportunities, by making economic decisions with information. In addition, he points out that an important part of our decisions is associated with financial behavior, which directly impacts his personal and family environment, from the search for funding for studies to planning for retirement. Thus, having an adequate financial education will favor an intelligent selection of financial products, based on well-informed decisions.

**Keywords:** Entrepreneurial Culture and Financial Education Between Students of the Veracruzana University, Veracruz Region

### Introduction

#### Background

The benefits of having an adequate financial education also extend to the national economic level, since, as BBVA (2015) points out, greater economic and financial education contributes to explain the level of financial development in the country, and which ultimately leads to lower inequality. In this way, having policies to promote these issues would contribute to reducing inequality by allowing large groups of the population of a country to access financial markets to make their savings profitable. This can also favor an improvement and development of the domestic financial market and consequently contribute to economic growth.

However, the picture of financial education in Mexico is unfavorable, since, as mentioned by BANAMEX and UNAM (2008) in the results of the First Survey on Financial Culture in Mexico, there is, in the majority of the population, a medium-term or long-term vision in matters related to finances. In addition, an incipient "control and expenditure planning" culture was identified. This is because, overall, about one in five households had a record of expenditures or planned income, debt and household savings.

In this sense, it is observed that in Mexico there is an environment with gaps and gaps in terms of financial culture, both in terms of training and information, which is more evident among the rural population and sectors of lower education and socioeconomic level, causing Serious consequences, among which are the lack of planning in the control of expenses, income and debt, lack of savings and a culture of foresight, which undoubtedly compromises the stability of most Mexican families.

In addition to this, this lack of financial education has repercussions in the area of business, and especially among the projects of micro, small and medium enterprises (MSME's) and entrepreneurs, which, according to Carton, Hofer and Meeks (1998) are those people with the ability to identify market opportunities to create companies and thus generate value.

This is evident since, as Lederman, Messina, Pienknagura and Rigolini (2014) state that there is a large gap between the ability to access financing between large companies and the rest, with larger ones being widely favored. This difficulty faced by MSMEs to raise capital also implies greater demands on their use, which undoubtedly requires an adequate level of financial education. In addition, Lederman et al. point out that it is possible that this access barrier to financing that new companies experience is negatively affecting the entrepreneurial potential of Latin America and the Caribbean.

Also, Marín (2014) stresses that it is important for entrepreneurs to have the ability to evidence their knowledge in financial matters, because in this way they can overcome the challenges of the market. Similarly, Di Costanzo (2013) argues that a company that begins operations without basic financial education has a high chance of failure, while those that incorporate good financial practices increase their chances of remaining in the market. Thus, financial education has a great influence on the success of entrepreneurial projects.

Once the importance of the topics of financial education and entrepreneurship in the national and international agencies has been identified, it is necessary to identify one of the main spaces where strategies can be designed and implemented in favor of these topics: the university. This, as mentioned by Neck (2014), is because education is an essential factor to start a business, and therefore the university gives the student the space where he can practice the venture, and at the same time can learn to deal with the uncertainty of the market, which is part of the world of entrepreneurship.

Thus, universities have a fundamental role in the process of training competent individuals to meet the demands of an increasingly competitive labor market, in which they will have to make use of financial tools and entrepreneurial skills. However, Lopez (2010) emphasizes the fact that the level of schooling is not directly related to the degree of financial education of individuals.

Based on the above, there is interest in identifying the level of financial education and how widespread is the entrepreneurial culture among university students in our country. However, given the large potential population to be addressed during this project, we intend to limit our space to the context of our federal entity, in which the Veracruzana University represents the main house of studies given its presence and coverage in twenty-eight municipalities distributed in five regions: Xalapa, Veracruz, Orizaba-Córdoba, Poza Rica-Tuxpan and Coatzacoalcos-Minatitlán.

Given these premises, the following research question that will lead to the development of this project is proposed: which is the level of financial education and entrepreneurial culture among the students of the Veracruz University, Veracruz region?

Then, this work aims to identify the level of entrepreneurial culture and financial education among the university students of the different areas of knowledge of the Veracruz University, Veracruz Region. Next, a series of arguments that validate the pertinence of this work are presented.

### **Justification**

The close relationship that exists between the level of financial education and the level of success of entrepreneurial

projects is very important since they affect the pattern of economic growth in emerging economies. This is why the Inter-American Development Bank (IDB, 2014) has emphasized among senior officials of ministries and agencies of Science, Technology and Innovation of Latin America and the Caribbean the need to discuss public policies that promote entrepreneurship. This institution also continues to promote the dissemination of financial education programs, since these have a fundamental impact on the well-being of citizens (IDB, 2015).

This IDB effort can build on the widely accepted premise that closely links business to economic growth and productivity (Lupiáñez, Priede & López-Cózar, 2014). In this sense, they emphasize that the business aggregate and the creation of new units represent the engine of the economy of the industrialized countries (García, Martínez & Fernández, 2010; Galindo & Méndez, 2011). Similarly, Álvarez, Giraldo and Martínez (2014) point out that the sum of entrepreneurial entrepreneurship projects contribute to social and economic development at local and national levels; Being the local area where the positive effects are more evident, which translate into an increase in the level of employment and income of the population.

However, Lupiáñez, Priede and López-Cózar also point out the fact that among the empirical evidence there are no uniform results that allow us to conclusively confirm this premise, but these vary based on the context and the indicators used to quantify this relationship.

In addition, the premise that the lack of financial education has an impact on the development of young entrepreneurs (Singer, 2016) represents another area for further research on this subject, since, as Lederman et al. (2014), it is difficult to conclude that the lack of access to financing is one of the main constraints of innovation and the development of entrepreneurial projects.

Based on the above, the development of this work acquires relevance since, according to CONDUSEF (2013), there is a severe delay in our country in the area of financial education, which is evident since due to the lack of information people do not know the advantages or disadvantages they can get from their use.

Similarly, the National Entrepreneur Observatory (2013) emphasizes that in our country, despite the fact that entrepreneurs and MSME's generate a significant amount of jobs and income for the country, they suffer from a series of weaknesses; among which are: difficulty accessing financing, lack of knowledge on the subject and low productivity. Thus, raised these needs we recognize the importance of continuing and contributing to the analysis with concrete proposals on these issues, since they represent areas of opportunity for economic growth and social development in our country.

In addition, these topics will remain strategic on the international agenda, as the World Bank (2015) states that entrepreneurship and financial culture represent two of the major development tools. Added to this, in the context of the State of Veracruz, Mexico, there is little to no research regarding the level of financial education and entrepreneurial culture, jointly, among university students.

### **Empirical framework**

According to Siciliano (2009), cited by Khwaja (2009), financial knowledge is essential to promote sustainable projects; then, entrepreneurs must develop a series of financial competences to increase their business skills; similarly, Bruhn and Zia (2011) point the role of training to enhance entrepreneurial projects; in this case, they found that individuals that attended some business skills courses improved their financial knowledge, developed new business strategies and better personal and business financial practices.

Besides, the site Small Business BC (2016) mentions that financial literacy has gained attention not just from government agencies, but universities and high education institutions have developed a series of research projects to identify the status of students in this topic among countries. Also, it is mentioned that small business owners which have financial skills are more competitive and could manage changes in the economic environment in a better way; also, they could offer better support to their employees and even start training them in this area.

In relation to the relationship between entrepreneurship and financial literacy, Njoroge (2013) found that successful entrepreneurs had strong financial skills and got grades above average; on the opposite side, less successful entrepreneurs showed low financial skills and many of them ran informal businesses. Added to this, Nunoo & Andoh (2012) studied the implication of financial literacy as a way to develop sustainable business; according to them, financial knowledge and skills could help MSME's owners to access to better financial services, providing new options to support business performance. In their results, they stress that owners with high financial knowledge had access to better financial services.

Also, Mabhanda (2015) found that MSME's owners with low financial literacy levels had less ability to cope with economic environment changes and had poor performance at financial and managerial tasks, driving to less informed decision making.

Based on the above, it is observed that financial literacy has a positive impact on entrepreneurship as high financial skills could enhance MSME's performance.

### Methodology

The present study is based on the development of a descriptive, non-experimental and cross-sectional research. This, since it is intended to identify the level of entrepreneurial culture and financial education among the population under study; In addition, this work is non-experimental since the variables involved in its development are not manipulated, and of a cross-sectional type since the data was collected in a single moment.

Regarding the characteristics of the information obtained and the techniques for its processing and subsequent interpretation, this study is considered to be of a quantitative type.

In order to carry out the field investigation phase and compile the information that allows us to reach the aim of this work, a questionnaire was designed considering the instruments presented by Tiftik (2014) and Yılmaz & Sünbül (2008), quoted in Tiftik, which assess entrepreneurial skills. To measure financial literacy, the questionnaire designed by Atkinson and Messy (2012) was reviewed and adapted for this context.

In terms of population, the universe is represented by the total number of students at the Veracruzana University (UV) region of Veracruz. In this sense, the online report issued by the Directorate of Institutional Planning of the UV for the 2015-2016 cycle, yields a total of 11, 181 undergraduate students distributed in thirty educational programs. In order to manage such a large population, only students from Management Faculty were considered, and a sample size of 89 students was surveyed, based on non-probabilistic sampling for convenience. As a inclusion criteria, only students who have passed more than 75% of total credits were considered, in order to guarantee that must have taken courses that promote math, financial and entrepreneurial business skills.

### Results

After analyzing the answers got from surveyed students, next results were got:

**Table 1. Survey results**

Entrepreneurial skills		Financial literacy	
Low	2.25%	Low	24.72%
Medium	28.09%	Medium	60.67%
High	55.06%	High	14.61%
Very high	14.61%	Very high	0.00%
Total	100.00%	Total	100.00%

As shown in Table 1, most students had a high level of entrepreneurial skills and a medium level of financial literacy; also, it is important to mention that just 2.25% had low entrepreneurial skills and no one showed a very high financial literacy level.

Considering the correlation index between Entrepreneurial skills and financial literacy, a value of 0.27 was found; then, financial education showed a direct but low effect on entrepreneurial skills.

## Conclusion

As many of authors reviewed in this study have stated, financial literacy has a positive effect on entrepreneurial skills. In the case of Management Faculty students from Veracruzana University surveyed, similar relation was found but not as strong as expected. Nevertheless, this is an important step to provide information on a topic not documented in our context and that could be helpful to design university policies addressed to enhance financial and entrepreneurial skills among students, increasing their chances to start a successful business project.

## References

- [1] Álvarez, A., Giraldo, O., & Martínez, B. (2014). Emprendimiento, factor clave para el crecimiento económico. Algunos elementos de casos en Colombia y otros estudios. *Escenarios: empresa y territorio*, ND, 1-16.
- [2] Atkinson, A. & Messy, F. (2012). *Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study*. OECD Working Papers on Finance, Insurance and Private Pensions..No..15., OECD.Publishing.,Paris..<http://dx.doi.org/10.1787/5k9csfs90fr4-en>
- [3] BANAMEX & UNAM. (2008). *Primera Encuesta sobre Cultura Financiera en México*. (1, 1-36), México, D.F.: Educación Financiera BANAMEX.
- [4] BBVA. (2015). Una educación financiera y económica global ayuda a reducir la desigualdad de un país. 17 de febrero de 2016, de BBVA Sitio web: <https://info.bbva.com/es/noticias/economia/consumo/una-educacion-financiera-y-economica-global-ayuda-a-reducir-la-desigualdad-de-un-pais/>
- [5] Bruhn, M. & Zia, B. (2011). *The Impact of Business and Financial Literacy Training for Young Entrepreneurs in Bosnia-Herzegovina*. The World Bank. Development Research..Available at: <http://econ.worldbank.org/external/default/main?theSitePK=469382&contentMDK=22905026&menuPK=476752&pagePK=64165401&piPK=64165026>
- [6] Carton, R., Hofer, C., & Meeks, M. (1998). *The entrepreneur and entrepreneurship: Operational definitions of their role in society*. Annual International Council for Small Business Conference, Singapur.
- [7] Di Costanzo, M. (2013). Educación financiera, clave para supervivencia de Pymes. 20 de febrero de 2016, de Forbes México Sitio web: <http://www.forbes.com.mx/condusef-dara-impulso-a-mipymes-y-emprendedores/>
- [8] Galindo, M. & Méndez, M. (2011). *Innovación y crecimiento económico: factores que estimulan la innovación*. Cuadernos de gestión, 12, 51-58.
- [9] García, C., Martínez, A. & Fernández, R. (2010). Características del emprendedor influyentes en el proceso de creación empresarial y el éxito esperado. *Revista Europea de Dirección y Economía de la Empresa*, 19, 31-48.
- [10] Inter-American Development Bank. (2014). BID y autoridades analizan políticas para impulsar el emprendimiento en la región. 21 de febrero de 2016, de Banco Interamericano de Desarrollo Sitio web: <http://www.iadb.org/es/temas/competitividad-tecnologia-e-innovacion/bid-y-autoridades-analizan-politicas-para-impulsar-el-emprendimiento-en-la-region,18237.html>
- [11] Inter-American Development Bank. (2015). BID aprueba US\$300 millones para seguridad social y eficiencia del gasto en salud de República Dominicana. 20 de febrero de 2016, de BID Sitio web: <http://www.iadb.org/es/noticias/comunicados-de-prensa/2015-11-19/republica-dominicana-seguridad-social-y-salud,11327.html>

- [12] Khwaja, A. (2009). The importance of financial literacy for entrepreneurs. Available at <https://www.entrepreneur.com/video/217601>
- [13] Kojo, E. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, Vol. 1 Iss: 2, pp.164 - 182
- [14] Lederman, D., Messina, J., Pienknagura, S., & Rigolini, J. (2014). El Emprendimiento en América Latina: muchas empresas y poca innovación. Washington, Estados Unidos de América: Banco Mundial.
- [15] Levin, A., Lin, C.F. & Chu, C.S. (2002). Unit root tests in panel data: asymptotic and finite-sample properties. *Journal of Econometrics* 108 (2002) 1–24.
- [16] López, P. (2010). Educación financiera, cuestión de sentido común en las personas. 19 de febrero de 2016, de El Economista Sitio web: Educación financiera, cuestión de sentido común en las personas
- [17] Lupiáñez, L., Priede, T., & López-Cózar, C. (2014). El emprendimiento como motor del crecimiento económico. *Boletín Económico de ICE*, 3048, 55-63.
- [18] Mabhandu, W. (2015). Lack of financial literacy exacerbates SMEs' appalling state in Gweru city. *Journal of Business Management Science*. VOL 1 ISSUE 12 December 2015 Paper 2. ISSN: 2455-6661
- [19] Marín, M. (2014). Educación financiera base del éxito de emprendedores. 18 de febrero de 2016, de El Economista Sitio web: <http://eleconomista.com.mx/sistema-financiero/2014/05/13/educacion-financiera-base-exito-emprendedores>
- [20] National Commission for the Protection and Defense of Financial Services Users. (2012). La educación financiera es para ti. 20 de febrero de 2016, de CONDUSEF Sitio web: <http://www.condusef.gob.mx/Revista/index.php/usuario-inteligente/277-la-educacion-financiera-es-para-ti>
- [21] National Commission for the Protection and Defense of Financial Services Users. (2013). Educación financiera, la clave. 20 de febrero de 2016, de CONDUSEF Sitio web: <http://www.condusef.gob.mx/Revista/PDF-s/2013/162/entrevistas.pdf>
- [22] National Entrepreneur Observatory. (2013). Análisis transversal del gasto en políticas de apoyo a los emprendedores, MiPYMES. 20 de febrero de 2016, de Instituto Nacional del Emprendedor. Sitio web: <http://www.mx.undp.org/content/dam/mexico/docs/Publicaciones/PublicacionesReduccionPobreza/one/Analisis%20transversaldelgastoenpoliticadeapoyoemprendedoresyMiPYMES.pdf>
- [23] Neck, H. (2014). La educación es importante para iniciar un negocio: Heidi Neck. 18 de febrero de 2016, de Innovación UNAM Sitio web: [http://www.innovacion.unam.mx/entrevista\\_3.html](http://www.innovacion.unam.mx/entrevista_3.html)
- [24] Njoroge, R. (2013). Relationship between financial literacy and entrepreneurial success in Nairobi County Kenia. Available at <http://chss.uonbi.ac.ke/sites/default/files/chss/NJOROGE%20ROBERT-D61-75875-2012.pdf>
- [25] Nunoo, J. & Andoh, F. (2012). Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter? Selected Paper prepared for presentation at the Agricultural & Applied Economics Association's 2012 AAEA Annual Meeting, Seattle, Washington, August 12-14, 2012. Copyright 2012 by Nunoo, Jacob and Andoh, Francis Kwaw. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided this copyright notice appears on all such copies
- [26] Singer, S. (2016). Falta educación financiera para el desarrollo de jóvenes emprendedores. 21 de febrero de 2016, de El Financiero-Bloomberg: <http://www.elfinanciero.com.mx/tv/falta-educacion-financiera-para-el-desarrollo-de-jovenes-emprendedores-singer.html>
- [27] Small Business BC. (2016). What financial literacy can do for your business. Posted: September 30, 2015; updated: October 26, 2016. Available at: <http://smallbusinessbc.ca/article/what-financial-literacy-can-do-for-your-business/>

- [28] Smyth, M. (2011). Educación financiera para todos: estrategias y buenas prácticas de educación financiera en la Unión Europea. 19 de febrero de 2016, de Comité Económico y Social Europeo Sitio web: <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-es.pdf>
- [29] Tiftik, H. (2014). A Survey of Entrepreneurial Tendencies Candidate Young Entrepreneurs: Foundation University Sample. *Journal of Management Research*. Vol. 6, No. 2. ISSN 1941-899X
- [30] World Bank. (2015). Los empresarios jóvenes, como factores que impulsan el crecimiento sostenible. 20 de febrero de 2016, de Banco Mundial Sitio web: <http://envivo.bancomundial.org/empresarios-jovenes-factores-que-impulsan-el-crecimiento-sostenible>
- [31] Yılmaz, E. y Sünbül, A. (2008). Üniversite Öğrencilerine Yönelik Girişimcilik Ölçeğinin Geliştirilmesi. *Selcuk University Social Sciences Institute Journal*, 21.

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## Generation Z-The Global Market's New Consumers- And Their Consumption Habits: Generation Z Consumption Scale

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### Abstract

Along with globalization, the structure of markets has changed. In today's markets, it is necessary to analyse the consumers' profile in order to appeal to consumers or compete with other companies and survive against them. Today's changing consumer structure reveals the differentiation of consumption habits as well. The Generation Z, which is included in the young age profile of the consumer segment, represents the year 1995 and beyond. This generation is also known as the mobile generation. They are interested in more technology than their predecessors (Generation X and Y), and they are actualizing their social lives more and more through smart devices such as mobile phone, tablets. This situation has also changed the perception of time and space in consumption habits. The shopping mall culture that emerged with globalization is now taking its place to Internet shopping. Ads made via social media and shopping made by these ads are among the preferences of Generation Z. In this study, we focus on changing the general consumption habits and the role of the Generation Z's profile in these habits. For this purpose, questionnaires developed for our study were applied to 200 people who are members of the relevant Generation Z. And the data obtained from the field are evaluated by reliability and factor analysis. Findings are interpreted as the Generation Z Consumption Scale.

**Keywords:** Consumption Habits, Generation Z, Factor Analysis, Reliability Analysis, Generation Z Consumer Scale

### 1. Introduction

The Generation Z (or Gen Z), which is included in the young age profile of the consumer segment, represents the year 1996 and beyond. The Generation Z, which will be the most dynamic actors of the trade sector in five to ten years, can be defined as a mass that is not much affected by classical sales and marketing activities. For this reason, it is very important to know the definition and characteristics of these individuals for every segment, because the future will consist of this generation. The aim of this study is to understand the compatibility of the Generation Z with the characteristics of Generation Z in literature; and at the same time, to determine the factors that affect the shopping preferences of this generation over the Internet. It is inevitable that these individuals who are growing in an environment where the Internet is used extensively and realize their social experiences on the Internet, will play an active role in shaping the social and economic structure of the country where they live. This generation, constantly seeking rapid change and innovation, also stimulates the environment of commercial competition or it will stimulate.

When considering that there is an increasingly young population especially in Turkey, it is a necessity to consider while determining the market policies for enterprises and entrepreneurs. In this context, our work will contribute to the literature about the Generation Z which has a restricted examination rate in this area. In this study, we will focus on changing the general consumption habits and the role of the Generation Z's profile in these habits. For this purpose, questionnaires

developed for our study were applied to 200 people who are members of the relevant Generation Z. And the data obtained from the field are evaluated by reliability and factor analysis. Findings are interpreted as the Generation Z Consumption Scale. This scale, which is the result of the analysis, consists of 17 questions and 5 factors in total.

## 2. Generation Z: A Conceptual Framework

The word "generation" is of Greek origin and emerged from the "genos", and means "getting out of the best possible presence." The word refers not only to biological/conceptual birth, but also to continuous change over time in terms of origin. In other words, it describes the development of something new in the societies (Clarke, 2012: 41).

Kupperschmidt (2000: 66) describes the generation concept as "a group that shares the birth-years and birth-places and critical-social events at the same time."

While the classification is made for this concept, it is considered that there are groups of people who are born in the same time within the same age groups and share the same history and culture (Weingarten, 2009: 27). The start and end dates are not precise, but the generation periods generally cover 15-20 years (Stapley, 2010: 847).

Along with making different evaluations in the literature, the common view for the classifications of generations has been gathered on four generations: they can be classified as follows (De Cooman and Drics, 2012: 44);

- The Silent Generation (1925-1944)
- Baby Boom (1945-1964)
- Generation X (1965-1979)
- Generation Y (1980-1994)
- Generation Z (1995 -...)(academia.edu)

There is no consensus on the beginning of the Generation Z in the literature. Some researchers accept different beginning years for this generation. These are; 1990 and after, 1995 and after, 2000 and after. In our study, 1995 and after was accepted as the starting year.

Generation Z is also referred to by different names; there are "Generation V", "Generation C", "Generation Cox", "Internet Generation", "Homeland Generation", or "Google Generation"(sophanseng.info). Apart from these, Strauss and Howe (1999: 335) describe it as "The New Silent Generation."

The characteristic features of the Generation Z are different from the other generations. The globalization of the world and the rapid spread of the Internet in the world are very influential in their characteristic structure. For this generation that is growing with computers and technological breakthroughs, technology and Internet are indispensable. They are constantly living together with the Internet, social media and their applications such as mp3 players, text messages, mobile phones, PDAs, YouTube, IPADs, media technologies. This generation can also be called the "mobile generation" (Kapil and Roy, 2014: 10-11.)

In another definition, it is thought that the Generation Z, known as "selfie generation", is less narcissistic than the preceding generation Y. They prefer to spend less because they witness global wars and economic recessions more often than others. According to previous generations, they are more optimistic about their health. They are aware that the world needs to be "better able to live". They prefer quick communication ([www.cyfar.org](http://www.cyfar.org)).

We can say that they are more conscious than previous generations because they spend their time on the Internet and they shape their life according to this atmosphere. Their friendships are mostly on social media. Because their world is a digital environment, their characteristic features are shaped like a virtual environment.

Although these individuals are still too young to get involved in the business world by age, consumption habits and general consumption trends belong to their generations. They still live as economically dependent on their parents. Therefore, they

are more selective in spending money and more selective in choosing products they will buy. They are sensitive to the concept of brand, but they are not more loyal than the previous generations. Because they have many alternatives in products and service, they expect constant innovation from the products they use. Visuality and design are important to them, as they prefer products. General expectations are the preferred product for convenience in their lives. Generation Z consumers make a detailed research on the product before purchasing a product. (Wood, 2013: 3) They absolutely test that product and make purchases by choosing the seller who offers the best price ([www.xyzuniversity.com](http://www.xyzuniversity.com)). This study was carried out in order to reveal the general trends of Generation Z in shopping habits.

### 3. Factor Analysis

Factor Analysis was developed by the psychologist Charles Spearman in the early 1900s with a study of measuring human intelligence. It is a technique that seeks a causal relationship. For this, it is based on the principle of measuring the correlation between the set of observed variables with the help of linear combinations of unrecognized sub-factors (Timm, 2002: 496). In other words, it can be said that factor analysis is a statistical technique indicating, which, and to what degree, variables relate to an implicit and unmarked factor (Kim and Mauller, 1978: 56).

It is used to assign the number of distinct constructs assessed by a set of evaluations (Fabrifar and Wegener, 2012: 3). The widespread use of Factor Analysis comes after the 1970's when the use of computer technology accelerated in the world. (Öngen, 2010: 1).

Factor analysis can generally be grouped under two main categories. These are called explanatory factor (EFA) analysis and confirmatory factor analysis (CFA). EFA gives the information to the researcher about the direction of a possible relationship, since there is no anticipation between variables. On the other hand, CFA is used to test the accuracy of a predetermined relationship (Altunışık et.al, 2010: 262-264). EFA has been used to understand the possible underlying factors structure of a set of evaluated variables without imposing any biased structure on the outcomes (Suhr, 2005: 2). Explanatory Factor Analysis has some assumptions. These can be explained as follows:

- The data are at least equally spaced.
- Random sampling technique is used.
- There is a linear relationship between the observed variables.
- Variables have normal distribution.
- Observed variable pairs have bivariate normal distribution.
- The variables observed in the last place are multivariate normal distribution.

The CFA has also some assumptions like as EFA. These can be listed as follows:

- Multivariable normality,
- An adequate sample size ( $n > 200$ ),
- The correct a priori model specification,
- The data are based on random sample ([www.statisticssolutions.com](http://www.statisticssolutions.com)).

Factor analysis has four basic stages. These are, firstly the calculation of the correlation matrix for all variables, then determining the factor numbers, and then the rotation of the factors (or factor conversion process), finally, calculation of factor scores and describing its names. In addition, three methods are used to evaluate the suitability of the data set: the creation of the correlation matrix, the Kaiser-Meyer-Olkin (KMO) and the Bartlett tests. (Akgül and Çevik, 2005: 419-428).

The general factor model (GFA) can explained that for  $p$  observed variables and  $q$  factors or implicit variables:

$$GFA_i = \alpha_{i0} + \alpha_{i1}f_1 + \alpha_{i2}f_2 + \alpha_{i3}f_3 + \dots + \alpha_{iq}f_q + e_i \quad (i = 1, 2, 3, \dots, p) \quad (1)$$

In the above form,  $e_i$  are residuals.  $f_1, f_2, f_3, \dots, f_q$  refer to common factors or latent variables.  $\alpha_{i1}, \alpha_{i2}, \alpha_{i3}$  and  $\alpha_{iq}$  are named the factor loadings.  $\alpha_{i0}$  is known that constant term and it has any role fitting and interpreting the analysis model (Bartholomew et al, 2002:180-181).

#### 4. Material

The purpose of this study is to understand how members of Generation Z determine the product preference and consumer priorities in the purchasing process. We use the "A Survey of Generation Z Consumption Scale" questions developed by us to achieve this goal.

At the outset, a questionnaire consisting of 37 questions excluding demographic questions was sent to 200 randomly selected respondents. Subsequently, the obtained data were tested by factor analysis and reliability analysis. Thus, we developed a scale with 5 factors and a total of 17 questions.

According to the obtained data, the demographic evaluations of the individuals who are member of Generation Z are as shown in Table 1.

able 1: Demographic Information

Gender	Frequency	Valid %
Woman	110	55
Man	90	45
Total	200	100
Age		
18	4	2
19	30	15
20	55	27,5
21	54	27
22	39	19,5
23	18	9
Total	200	100
Monthly Personal Income		
0-400 TL	76	39,6
401-600 TL	52	27,1
601-800 TL	26	13,5
801-1000 TL	18	9,4
1001-1200 TL	12	6,3
More than 1200 TL	8	4,2
Total	192	100

When Table 1 is examined, the following information is obtained. 55% (110 people) are female and 45% (90 people) are male respondents of the survey. In addition, 2% (4 people) of participants are in the age of 18, 15% (39 people) were in the age of 19, 27,5% (55 people) are in the age of 20, 27% (54 people) are in the age of 21, 19,5% (39 people) are in the age of 22 and 9% (18 people) are over 23 years old. The monthly budgets for the individual monthly expenditures of the participants are classified as follows: 39,6% (77 people) of participants have a budget between 0-400 TL, 27,1% (52 people) have a budget between 401-600 TL, 13,5% (26 people) have a budget between 601-800 TL, 9,4% (18 people) have a budget between 801-1000 TL, 6,3% (12 people) have a budget between 1001-1200 TL, 4,2% (8 people) Person) have a budget more than 1200 TL.

## 5. Application

Since the study will be evaluated by factor analysis, it is firstly assessed whether the study structure is appropriate for factor analysis. For this purpose, the KMO test value was calculated and the result was 0,694. However, when the MSA values that show the value of conformity to the factor analysis of each item were examined, they were eliminated from the questionnaire because the items A-2, A-29, A- 31 and A- 32 in questionnaire were less than 0.50. It is customary to remove the factor weight from the analysis so that the questionnaire can become stronger. However, there is no consensus on which items with the necessary value to be taken from the questionnaire. In general, items with a score below 0.50 are excluded from the analysis. However, there are also researchers who say that this ratio is 0.70. In our study, we preferred the other variables below 0.55. As a result of the reconstituted factor analysis after removal of the relevant items from the analysis, the KMO test value increased to 0.724. According to the "KMO" test values, the variables used for the study are "good" for factor analysis (Durmuş et al., 2013: 80-87). As a general evaluation, if the test value found in the "KMO" test is below 0,50, it is assumed that the variables are not suitable for factor analysis. In addition; it is known about the "KMO" tests that 0,50 weak, 0,60 moderate, 0,70 good, 0,80 very good, 0,90 perfection (Sharma, 1996: 116).

**Table 2: Total Variance Values Explained**

Components	Initial Eigenvalues			Sum of Transformed Squared Weights		
	Total	Variance %	Cumulative %	Total	Variance %	Cumulative%
1	3,895	22,914	22,914	2,223	13,076	13,076
2	1,803	10,605	33,519	2,027	11,922	24,999
3	1,624	9,551	43,069	1,984	11,672	36,670
4	1,183	6,959	50,028	1,890	11,120	47,790
5	1,054	6,201	56,229	1,435	8,439	56,229
6	0,946	5,564	61,793			
7	0,901	5,302	67,094			
8	0,826	4,861	71,955			
9	0,767	4,510	76,465			
10	0,733	4,310	80,775			
11	0,682	4,011	84,785			
12	0,652	3,837	88,623			
13	0,534	3,143	91,765			
14	0,468	2,750	94,516			
15	0,355	2,087	96,602			
16	0,348	2,046	98,648			
17	0,230	1,352	100,000			

Table 2 provides information on the number of dimensions of the questionnaire used. This structure, consisting of 5 sub-dimensions, has the capacity to explain 56,229% of the total variance. When the factors are assessed one by one; the first factor has 13,076% of the total variance, the second factor 11.922%, the third factor 11,672%, the fourth factor 11,120% and the fifth factor 8,439%.

**Table 3: Factor Loads Table**

	1	2	3	4	5
A16	,826	,047	,079	,210	-,177
A15	,810	-,008	,069	,192	-,095
A10	,589	,113	,208	-,114	,327
A8	,562	,001	-,013	,183	,334
A33	,042	,807	,055	,160	-,003
A34	,032	,766	,180	,147	-,171
A35	,018	,698	-,026	-,026	,163

A13	,031	,159	,764	,093	,163
A12	,046	-,009	,739	,240	,182
A17	,279	,138	,578	,306	-,149
A11	,041	-,009	,562	-,066	,076
A24	,232	,128	,150	,763	-,068
A28	,107	,033	,023	,702	,179
A26	,194	,220	,148	,556	,236
A1	,061	-,123	,191	,107	,617
A36	,078	,400	,027	,072	,590
A9	-,151	-,032	,174	,387	,459

Table 3 gives information on the factor loadings of the variables and the weights of the sub-factors. According to the above information; the factors and factors affecting the determination of the purchasing priorities of the individuals are regulated in Table 4.

**Table 4: Factor Analysis Outputs**

Old Factor Names	New Factor Names	Numbers of Questions in Factor	Substances in Factor
Factor 1	Internet Affect	4	A16, A15, A10, A8,
Factor 2	Product Description	4	A13, A12, A17, A11
Factor 3	External Factors	3	A24, A28, A26,
Factor 4	Deals	3	A33, A34, A35
Factor 5	Product Identity	3	A9, A36, A1

At the beginning, there were a total of 37 questions for our work. As a result of the factor analysis, the number of questions decreased to 17. You can see in Table 5 what are the questions of scale developed in our work.

**Table 5: Factor Analysis Outputs**

Factor Names	Questions
A16	Internet Affect If I find the prices of the products at the internet websites cheaper than stores, I prefer purchasing on the internet.
A15	
A10	
A8	
A33	Product Description I will pay high fees if a product longevity.
A34	
A35	
A13	
A12	External Factors While choosing to buy a product, I read comments about that product on the social media.
A17	
A11	
A24	Deals Opportunities (points / money points) offered by Internet websites in stores will lead me to purchasing on that website.
A28	
A26	
A1	Product Identity When shopping, I buy environmentally sensitive products (nature friendly, recyclable, respectful of animal rights, etc.).

A36	I think it is a more practical way to enjoy a product on the internet websites and buy it from the store.
A9	In the preferred product when shopping, I evaluated according to the quality of the product brand.

Reliability analysis was performed for "Generation Z Consumption Scale" so that the output obtained could be used as a scale. As a result of the reliability analysis, the developed questionnaire could be regarded as valid. Cronbach's Alpha value was calculated as 0,793.

## 6. Conclusion

It is important to note that the preferences of life for the Generation Z are much different from the previous generations. The purchasing culture of this generation, which has spent a great majority of its days on the Internet, also sharply affects their priorities and expectations too. A questionnaire was developed to understand the Z people by us, and applied to the 200 people who are member of Generation Z. As a result, we identified 5 factors that determine the purchasing preferences of them. These factors have been named as Internet affect, product description, external factors, deals and product identity. The reliability analysis result was calculated as 0,793. This result shows that the questionnaire data is strongly reliable.

## References

- [1] Akgül, Aziz ve Osman Çevik (2005), İstatistiksel Analiz Teknikleri (SPSS'de İşletme Yönetimi Uygulamaları), Emek Ofset Ltd, Ankara.
- [2] Altunışık, R., Coşkun, R., Bayraktaroğlu, S. ve Yıldırım, E. (2010). Sosyal Bilimlerde Araştırma Yöntemleri. Sakarya Yayıncılık, 6. Geliştirilmiş baskı, Sakarya.
- [3] Bartholomew, D. J., Steele, F., Moustaki, I. and Galbraith, J. I. (2008). *The analysis and interpretation of multivariate data for social scientists*. Second Edition Boca Raton, FL: Chapman and Hall.
- [4] Durmuş, B., Yurtkoru, E.S. ve Çinko, M. Sosyal Bilimlerde SPSS'le Veri Analizi. Beta Yayınları, 5. Baskı., İstanbul.
- [5] Fabrigar, L. R., Wegener, D. T. (2012). *Exploratory Factor Analysis*. Oxford: Oxford University Press.
- [6] [http://www.academia.edu/2340731/\\_Z\\_ehir\\_gibi\\_bir\\_kuusak/](http://www.academia.edu/2340731/_Z_ehir_gibi_bir_kuusak/)(17.02.2017)
- [7] [https://cyfar.org/sites/default/files/cyfar\\_research\\_docs/Generation%20Z%20Slides.pdf](https://cyfar.org/sites/default/files/cyfar_research_docs/Generation%20Z%20Slides.pdf)(01.04.2017)
- [8] <http://www.sophanseng.info/wp-content/uploads/2014/11/Generations-Chart.pdf>. (31.03.2017)
- [9] <http://www.statisticssolutions.com/academic-solutions/resources/directory-of-statistical-analyses/confirmatory-factor-analysis/>(05.04.2017)
- [10] Kapil Y., Roy A. (2014), "Critical Evaluation of Generation Z at Workplaces", International Journal of Social Relevance&Concern, Volume 2, Issue1, pp.10-14.
- [11] Kim, J.O., Mueller, C.W. (1978). Introduction to factor analysis. Beverly Hills: Sage Publications.
- [12] Kupperschmidt, B.R. (2000), "Multigenerational employees: strategies for effective management", The Health Care Manager, Vol. 19 No. 1, pp. 65-76.
- [13] Öngen, K. B. Doğrulayıcı Faktör Analizi İle Bir Uygulama, Uludağ Üniversitesi. Sosyal Bilimler Enstitüsü Ekonometri Anabilim Dalı, Yüksek Lisans Tezi. 2010.
- [14] Peter B Clarke. (2012 ) Din Sosyolojisi, Çev. İ.Çapcıoğlu, İmge Kitabevi.
- [15] De Cooman, R., Dries, N. (2012). Attracting Generation Y: How Work Values Predict Organizational Attraction in Graduating Students in Belgium., Ed. Eddy S. Ng, Lyons T.Sean vd., Managing th New Workforce, UK,p.44. S.44-63.
- [16] Robin M. Weingarten.(2009) Four Generations, One Workplace: A Gen X-Y Staff Nurse's View Of Team Building In The Emergency Department, Journal Of Emergency Nursing, Volume 35, pp. 27-30.
- [17] Sharma, S. (1996). Applied Multivariate Techniques. John Wiley & Sons, Inc.
- [18] Sladek, S. ve Grabinger, A. (2013). Gen Z: The First Generation of the 21st Century has Arrived!.[http://xyzuniversity.com/wp-content/uploads/2014/02/GenZ\\_Final.pdf](http://xyzuniversity.com/wp-content/uploads/2014/02/GenZ_Final.pdf)
- [19] Stanley, D. (2010). Multigenerational Workforce Issues and Their Implications for Leadership in Nursing, Journal of Nursing Management, pp. 846-852..
- [20] Strauss, W. ve S. Howe. (1999). *Generations: The history of America's future, 1584 to 2069*. New York: Quill/William/Morrow.

- [21] Suhr, Diana D. (2005). *Principal Component Analysis vs. Exploratory Factor Analysis. In SUGI 30 Proceedings, 10-13 April 2005 . Philadelphia, Pennsylvania.*
- [22] Timm, N. H. (2002). *Applied Multivariate Analysis.* USA: Springer.
- [23] Wood, Stacy. (2013) *Generation Z as Consumers: Trends and Innvation, Nc State University, Institute for Emerging Issues, .. pp.1-3.*

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## The Importance of Local Events for Positioning of Tourist Destination

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### Abstract

This paper highlights levels of influences of local events on the image of region of Konavle, as a micro-destination near Dubrovnik. As a municipality Konavle has 32 settlements facing the agriculture and tourism (TZ Konavle, 2016). The aim is to research the influence of the development of local events in Konavle on the destination development in terms of dynamic and competitive market changes. From 2009 Association of Agritourism Konavle has been organizing a local event Scents of Christmas in Konavle. It carried out activities to promote and develop rural tourism in the southernmost region of Croatia (Agritourism Konavle, 2016). It operates through organized events, promotional tour on other rural destinations. For members it organizes workshops, including them in projects. Scientific attitudes of theoreticians in this area, clearly argue the interactivity of selective modalities of tourism and its positive effects on the destination. Based on that attitudes, it was conducted the empirical research by the survey method. The significance of the elements of local event on the recognition and an image of the destination, has been proven. While presenting heritage, an organized event impact on alleviation of the problem of seasonality of every tourist place on the Croatian coast. This event brings together the majority of visitors from micro-destination, Konavle, but also attracts visitors from Dubrovnik. Because of connection between two destinations, it is essential to explore the selected tourism forms, as well their role in the creation of innovative tourist products.

**Keywords:** local event, destination, rural tourism, event tourism, image

### I. Introduction

The term - event tourism as a link between events and tourism was mentioned in the literature for the first time in 80th of XX century. The basis for the development of manifestation offers destination is growth in the number of participants in tourism, their leisure and qualitative changes in the behavior of tourists. Events are subject to destination marketing complementing the final product. Competition among destinations strengthens and grows. It is necessary to continuously explore new ways of diversification of the existing tourism product, and devise new concepts offers to destinations compete on the market. Growing problem of Croatian tourism, especially the coastal areas, is pronounced seasonality therefore it is necessary to work on resolving this problem. By creating events and activities that take place outside of the tourist season, affect the decrease in number of visitor's gap between summer and winter months. Many destinations have recognized the importance of event for bringing multiple benefits to the destination. These events are organized once or several times to experience unusual emotions. Realization of events claims the organizational abilities, the knowledge and skills thus contributing to the image of the destination. Tourism in Konavle has been developing since 1924, when an Association for development of foreigners in Cavtat was founded. Firstly it was aimed at orientation of dominant fishing local population towards tourism.

Since that time until today, the main tourist resource of Konavle are tangible potentials - cultural and religious heritage and intangible secular heritage. Due to the rural character of destination, Konavle is predisposed to develop (along the events)

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more forms of selective tourism, among which the most important is rural tourism. Rural tourism is developing by encouraging the development tourism on farming communities, and the development of agritourism (Brailo 1995), whereas the agritourism is defined segment of rural tourism, which enables added value products to farmers.

## **II. Literature Review**

### **A . A Cronological Overview of the Notion of Events in Human Society**

Historically manifestations are as old as mankind, starting with the ancient ceremony in honor of the gods, the medieval knights' celebrations, religious events until today, longest-running and most popular of the Olympic Games (Getz, 1989). The first organized tribal human community transfers stories and songs from generation to generation and organize various tribal ceremony. From era of old civilization of ancient Greece in honor of their deities are dated (eg. Dionysian celebrations), sport events (Olympics, Pythian Games of Ancient Greece, and gladiator games in ancient Rome), and the celebration of important annual events (eg. Chinese New Year).

Through the Middle Ages in Europe are organized mainly religious events and fetes, and knights' tournaments. A contemporary time has not stopped eternal need of people to socialize, compete, entertain, demonstrate, that in a special way to mark some important events in the life of an individual or society. Throughout the events, participants are in attach with historical events, that is evident through the celebration activities, happenings, the emergence of festivals. Events or organized events are a reflection of modern tourism, with regard to culture (music festivals, concerts, exhibitions, events, etc.), sports (regattas, water skiing, etc.), tradition (such as carnivals, gastronomy, and folklore)

The new era, in proportion to the population has increased an economic progress and areas, leading to the formation of different types, shapes and volume of events

### **B. Scientific Approach to the Term of an Event**

In the 1960s and 1970s the sector of events was not recognized as a separate area. Ritchie and Beliveau (1974) for first time in literature define hallmark events. The industry of events gains momentum in 80's and 90's of the last century. One of the most influential research projects within that era is related to the first large organized travel -Grand Prix (Burns and Mules, 1989).

The requirements of modern tourists are changing with the ever-growing need for a wider range of offers, which provides a wider choice of events. Events offer includes richer and reduce the effect of seasonal fluctuations. An event is global phenomenon whose business becomes increasingly important in a contemporary tourism. The 21st century captures tourism transparent as the transformation of positive experiences in feelings of satisfaction expressed by number of visits to the destination, frequency of visits, and the continuity of returning to the same. The event (as a term) refers to specific rituals, presentations, performances or celebrations. They are closely, pre-planned and created to commemorate these special events or to achieve specific social, cultural or corporate goals. Event study is an academic area directed the creation of knowledge and theoretical background of the planned events. Its origins could be found in the social sciences and humanities, especially in management and arts. Event management is an area of application of the science of events in practice. Event management alike occupies the private, public and non-profit sector. The term – event tourism started being more often used in 1987 (New Zealand Tourist and Publicity Department).

Getz (2008) argues event tourism in context of destination and a marketing strategy for the realization of the potential economic benefits of the event. Event tourism is an important and rapidly growing segment of international tourism (New Zealand Tourist and Publicity Department, Tourism Report 38, 1987). Events stimulate the intensity and the dynamics of travel. Event management is a fast growing professional field in which tourists constitute a potential market for planned events and the tourism industry has become a vital stakeholder in their success and attractiveness (Getz, 2008: 403). According to Mossberg (2000), the event is a special activity out of the ordinary everyday life. He describes how the events are held regularly, or only once, and that range from small to large with a strong or weak image.

Getz and Cheyne (2002) argue that events over the last decade have become an important means of acquiring advantages and realizing the different economic, social and environmental objectives for many communities and tourist regions. According to Allen et al. (2002) special events describe specific rituals, presentations or anniversaries specifically planned or designed to mark a specific occasion, cultural or organizational goals. Include celebrations, marked significance given the culture of the people, the public opportunities, unique cultural events, but more and promotion functions, operation and

product companies. The term refers to specific rituals, presentations, performances or celebrations that closely, pre-planned and created to commemorate these special events or achieve specific social, cultural or corporate goals (Getz, 2007). A special event (event) is any public event that takes place live in front of (not) the expected audience. According to Mossberg (2000), the event is a special activity out of the ordinary everyday life. He describes how the events are held regularly, or only once, and that range from small to large with strong or weak image. Getz (2005:16) shared definitions of special events from the point of an organizer as a "unique and unrepeatable or rarely (periodic) was held events occurring outside of normal programs or activities of organizations that are sponsored or organized", and in terms of a customer as "an opportunity for relaxation, fun, social or cultural experience that is outside the normal framework of choice or out of everyday events". Events are characterized by unique life experience, concentration on a short period of time and long haul planning. Special events are usually held only once involve high risk, especially financial and security concerns.

Next figure 1 shows the categorizing of events according the size of events.



Figure 1 The portfolio approach to event tourism strategy - making an evaluation : Getz (2005)

Mega events are organized events with an impact on the national economy. They engage the entire national economy. Their contents are accompanied by an exceptional media attention. Influencing the economy and society under the community that are taking place (Allen et al 2005: 13), they are defined - "mega" because of the volume in the number of visitors (including the audience), the target markets, the level of public funding, the political impact of media coverage. Mega events were the subject of the AIEST-COLA World Conference (AIEST, 2017). Roche (2000; 2006) has studied the Olympics and mega events in the context of globalization but Hiller (2000) an urban-sociological perspective of mega events.

Hallmark event - refers to the kind of events that have become a symbol of a city or region, and they are identified with the event (brand) (Mardi Gras in New Orleans). They have become a synonym for the place, city or the region, and are characterized by recognisability and the stability (eg. Oktoberfest in Munich). They are organized in one or more times, with a limited duration, but primarily created to increase awareness, of the attractiveness and the profitability of destinations (its image and brand), in a short and / or a longer period. With such events, the success and recognition are the results of their uniqueness, created in terms of specific destination identity (Ritchie, 1984). Regional events are important events that have been able to with regard to their coverage and media interest, attract a large number of visitors and achieve a significant economic impact.

The local events are held within the host community. By its purpose, it is primarily oriented to the the interests of entertainments of this the local population. These events, in addition to operate economically positive, above all, by strengthen local pride and self-awareness, support tolerance, and encourage participation in sports and cultural events. Such events are a part of almost every town and city, creating a sense of belonging to them. Local authorities support local events as part of their social and cultural strategies. In their organization, volunteers often participate from the host community. They are often held in public areas such as parks, streets and schools. The local authority participates in the organization of an event. Local event could evolve into a hallmark events and it could also attract more visitors to the community (Allen et al. 2011).

Festivals and events seek for support and cooperation, influencing on improvement and its wider economic terms. The strategy emphasizes on tourist attractions, and using it to gain legitimacy and stimulating a growth. Events must provide material resources and political support to become sustainable, thereby losing a degree of independence in the process.

Table 1 An organized event according to the size

Event Type	Description and features
<b>Mega events</b>	The largest organized events with effects and importance on the level of international market. Examples are the Olympics, FIFA World Cup. Such events have a direct impact on tourism, media attention and national economy.
<b>Hallmark events</b>	They become synonymous with the city, town or region and are widely recognized thematic recognizable and more specific
<b>Major events</b>	Aims to increase interest of tourists for a specific destination or region. Examples can be mentioned Carnival (such as Rijeka Carnival) which attracts domestic and foreign tourists. These events brings the city a significant financial benefits and the promotion.
<b>Local events</b>	With their topics and the purpose are primarily intended for local people as well as acting to create sense of community and of belonging.

Source: Processing of authors

Even local events which are with its purpose directed primarily for local people provide a sense of identification of tourists with locals, giving them insight into the local tradition which contributes the better tourist experience (Brailo, 1995). Cultural changes and tourism are in an interactive relation. Culture is a measure of the value that an individual obtains on the basis the learning and perceptions. Culture influences the formation of specific motifs.

Observed over a longer period the culture is changeable, and adaptable. Cultural values influence on the tourism. Because of its variability they impact the new trends on which features are designed the new tourist products. It is a way of spending time. This confirms the fact of an increasing free time dedicated to entertainment. This affects the changes of values which are reflected in progress of materialism to self-actualization, from passivity to the interactivity, from quantity to the quality. It is significant in countries with higher level of living standards (Coates et al., 1997: 95).

Competitive conditions in the tourism market impose a global cultural identity, while at the same time, the specific interests of tourists intensely affect the need for profiling of innovative products. By investing in cultural events with the aim to restore the tradition of cultural theft, cultural changes are evident on the level of opposing of the global cultural identity and the specific interests of potential consumers.

On the tourist market is evident shift in preferences from standard toward specific products in tourism. At the same time, further efforts are invested in activities that concentrate around anthropogenic factors in the area. Cultural celebrations, including entertainments, festivals, carnivals, religious events and arts, are usually classified under the Cultural Tourism in the literature. The main study of the Travel Industry Association of America (2003) profiled the cultural and historical tourists, including cultural events as attractions and activities. All types of planned events have tourist potential, even small weddings and meetings. But with a growing size and the importance of the event, it can also become a primary motif of tourists for visiting certain tourist destination

According to Douglas N., Douglas S., Derr R. (2001: 3) - special Interest tourism, is defined as the phenomenon arising from customized recreational and leisure activities, expressed by the specific interests of individuals or groups. There are many definitions, but all share the significance tourist motives. Destinations offer are tailored for achieving the satisfaction of particular target segment. The selective tourism is considered from the viewpoint of supply and the demand (Kesar O. 2012/2013).

Table 2 Classification of specific forms of tourism

SPECIFIC FORMS OF TOURISM (based on next resources)		
Natural resources	Social resources	Other resources
<ul style="list-style-type: none"> <li>- Health Tourism (outdoor)</li> <li>- Sports' tourism (adventure),</li> <li>- Nautical tourism (sailing vs. cruise)</li> <li>- Ecotourism (national parks or of protected areas),</li> <li>- Rural tourism (preservation of traditional values),</li> <li>- Hunting and fishing tourism (only an organized form)</li> <li>- Naturism (free relation between man and the nature),</li> <li>- Robinson's Tourism (in contrast to the daily life),</li> <li>- Camping (a return to nature)</li> <li>- Team-building trips (raising of communion)</li> <li>- Photo-safari trips (photographing of wild animals and of their habitats)</li> <li>- Tourism resulting in combinations of multiple activities in area)</li> </ul>	<ul style="list-style-type: none"> <li>Health Tourism (outdoor)</li> <li>- Sports' tourism (adventure),</li> <li>- Congress tourism,</li> <li>- Cultural (main motive of education)</li> <li>- Gastro tourism (wine, food preparation and consumption),</li> <li>- Event tourism (entertainment, cultural, economic)</li> <li>- Religious tourism (pilgrimage, holy places)</li> <li>- Tourism based on artificially attractions (amusement)</li> <li>- Casino - tourism (gambling combined with a shopping),</li> <li>- Incentive travel (travel motivating for our employee)</li> <li>- The urban tourism (tourism of big cities)</li> <li>- The film tourism (specific sites, scenery),</li> <li>- Party tourism (24/7 entertainment for the younger population)</li> </ul>	<ul style="list-style-type: none"> <li>Study tours</li> <li>(Thematic travels)</li> <li>- Shopping tourism,</li> <li>- Business Travel</li> <li>(Participants outside the business travel programs behave as tourists)</li> <li>- Historical tourism</li> <li>(Motives are civilizational progress)</li> <li>- An ethnic tourism</li> <li>- The polar tourism</li> <li>(Motivated activities in the Arctic Circle)</li> <li>- The Escapism</li> <li>("Escape" from the domicile anywhere, last-minute travel)</li> <li>- The political type</li> <li>(Political meetings),</li> <li>- The post-war and a post-crisis types</li> <li>(travel on post-war locations, often are affected by natural disasters)</li> <li>- The new age type</li> <li>(Postmodern holistic approach that combines environmental protection with an emphasis on social responsibility)</li> <li>- Virtual tourism</li> <li>(3D presentations the world megaatrakcija and famous destinations, etc.</li> </ul>

Source: Čavlek N. et.al. (2011). Turizam- ekonomske osnove i organizacijski sustav; Školska knjiga, Zagreb, p.404.

The competitive attractiveness of tourist destinations can be created by affirming of cultural heritage (such as concerts, exhibitions, etc.), connecting the tourist offer with cultural identity (traditions, natural beauties and local customs), events, entertaining programs, all in order to attract a larger number of tourists, to extend the season and to improve an efficiency of managing values in destinations (Gračan and Rudančić - Lugaric, 2013).

### C. Effects of Events

Events affect the almost every aspect of human life, whether social, cultural, economic, environmental or political. They possess positive and negative ranges of influence to a particular destination and on business entities in the destination. Events are organized for various reasons. The most important are: satisfaction of social needs, the construction of facilities and infrastructures, the promotion of cities / countries, an increasing of tourist activities and various political reasons.

Among the core causes is the realization of various positive effects arising. It is necessary to develop and to maximize the positive effects, also to minimize the negative effects related to the maintenance of events.

As shown in Table 3, the positive and negative impacts of events act in areas of social, cultural, ecological, political and economic scope.

Table 3 The impact of organized events on the tourist destination

Effect of organized events on the destination	Positive effects on the the destination	Negative impacts on the destination
Social and cultural	Sharing of experiences	The social alienation
	Revitalization of traditions	The manipulation of society
	Creating of the social pride	The negative social image
	Evaluation of social groups	Misbehavior

	An increase in community participation	The social dislocation
	The appearance of new and the challenging ideas	Global ideas
	The expansion of cultural perspectives	Global identity
<b>Physical and ecologically-viable</b>	An emphasis of the environment - the nature	
	Providing the best models of practices	The loss of the comfort
	Improvement of the environmental awareness	The destruction of the nature
	The improved transport and communications	The noise pollution
	Urban transformation and renewal	The traffic congestion
<b>The political effects</b>	International prestige	Losing of prestige
	The improved profile	The risk of an unsuccessful organized event
	Improving of investments	Erroneously allocation financial resources
	Social cohesion	The lack of of responsibility

Source: Bowdin, G. et al.(2006). *Events management 2<sup>nd</sup>ed.* Oxford: Elsevier

Events have direct social and cultural impact of participants, including increased community pride, sharing of experiences, increased community participation. An organizing of events is an excellent opportunity to highlight the quality and specifics of the tourist destination. Positive physical and ecological effects are reflected in raising awareness on environmental protection and transformation, but also in the improvement of transport and communication infrastructure. On the other hand, the pollution of the nature is almost inevitable, as well as the noise and traffic congestion. By adopting the strategy of sustainable development in the organization of events as well as care for the environment, negative impacts can be greatly reduced or even eliminated, and thus to contribute to the reputation (image) of environmentally conscious of destinations (Gračan and Rudančić - Lugaric, 2013: 277).

Benefits are diverse. They are mostly seen through economic impacts. They have a high intensity power of attracting of visitors to an area (Getz and Cheyne, 2002; Mossberg, 2000). They can also generate travel to a specific destination after the event is over. Thus create value by selling innovative products that destination offers. Moreover, events can have an effect on creating of destination image, creating a more favorable perception of a particular area. A more positive image of the place has an impact on industrial investments. Moreover, events, especially the mega event, can play an important role in initiating the construction of infrastructure, trade and entrepreneurship, as well as urban renewal.

For many destinations events provide an additional public attention through extensive media coverage. Finally, one must not underestimate the social and cultural effects that events cause. Events serve a very important social purpose and offer to both tourists and local people an unusual experience. When you observe all the benefits of the event it becomes apparent that destinations have great potential in events. Accordingly, destination managers should be effectively engaged in tourism events. Thanks to the growing competitiveness of tourist destinations, the development of event has become a big business.

Factors influencing the development and creation of knowledge about tourism events could be found in specific needs, motivations, preferences, with assumptions such as free time and financial resources. Social and cultural factors stimulate the creation of innovative and special events (Allen et al. 2002). Consequences of an event are obvious through the results and impacts of various dimensions as personal, social, political, cultural, economic and environmental impacts. Support for the creation of knowledge and the development of the theory of tourism events are models and processes of tourism events that defined spatial and temporal models, policy management and creation of knowledge in tourism events. Results, influential factors, models and processes of tourism events are associated in creation of knowledge in tourism events. The experience of tourism events is changing, by changing beliefs and attitudes towards values. Participants will adopt these changes in a new behavior in the future. The transformation of needs is influenced by experiences (Mihajlovic and Koncul, 2016). They are gained by tourism events, also as a part of social networking. Events have the meaning given by social groups, communities and society as a whole. This affects individuals but regardless they are able to make their interpretation of events.

#### **D. Activities focused on the competitiveness of SMEs in tourism sector on the Croatian national level**

Given the economic effects and the contribution to the world economy, the tourism market with an impressive share participates in the global international context. Achievement of business goals for destinations depends on their abilities to meet the desires and needs of tourists. Tourists today are not loyal to the destination but the destination brand, whereby it is important its recognisability. A tourist interest is rotated from the standardized stay in the destination toward the natural and cultural features of travel as well as sports and entertainment facilities. Therefore, the tourist offer disperses on wider areas by creating tourism destination which is not administratively bounded. A tourist destination should be treated as an open and dynamic system that interacts: tourists, employees and the local population. There is a high degree of horizontal substitution. On the basis of different definitions, it is necessary to summarize the most important characteristics of a tourist destination: it makes the spatial whole of the tourist offer, it must have sufficient elements of the offer that is oriented towards the market, tourists, the destination must be managed by the experts.

Tourism represents an important engine of the economy, creating powerful effects of the multiplication, which are manifested in other economic areas. In 2013, the share of tourism (in overall economic GDP) was estimated at 16.5%. Two years later, tourism had a share of 20% of the total international receipts with 7.2 billion euros. This significantly reduced the foreign trade deficit of Croatia, covering 1/3 of Croatian exports and 2/3 of the export of services. Furthermore, in 2016, in Croatia was recorded 91, 3 million overnight stays, of which 80 million foreign overnight stays and 15,828,000 thousand tourist arrivals of which 88% foreign (Statistics, Ministry of Tourism, 2016). The number of permanent employed in tourism sector accounted for almost 10% of total employment. Concerning foreign direct investment an annual average of net flow of such investment was decreased from 6% of GDP in the period 1999 and 2008 to 2% of GDP in the period from 2010 to 2013, indicating a risk that a limited amount of investments could be forwarded to the trade and the production sector.

There needs to be circumstances changes and to attract foreign direct investment in production domestic assets and economic transformation, and to also to increase the impact of FDI in the sector of SMEs.

Networking and clustering can bring advantages for SMEs, particularly with regard to the strengthening of their value and production chains. In Croatia, more than 500 companies are involved in clusters that employ over 25,000 workers. A large share of the clusters is occupied by tourism and agriculture. In addition, there are one thousand five hundred and thirty-one registered cooperatives with over 21,000 members (CEPOR, SBA. 2016). Croatian SMEs do not invest enough in innovation with the aim of introducing new products and services on the market. Croatia is considered as a "moderate innovator" with the percentage of companies involved in innovation 8%, what's under EU average. Support will be offered the establishment of innovative newly emerging companies, but also improving the innovation and commercialization of activities of existing SMEs, particularly in areas referred in the development of: a) promotion of entrepreneurship, by facilitating the economic exploitation of new ideas and encouraging the creation of new businesses, including enterprise incubators; b) ensuring the better access to finance for SMEs; c) providing a favorable environment for the establishment and development of enterprises; d) supporting the capacity of SMEs for growth at regional, national and international markets and innovation processes; e) improving the development and growth of SMEs and innovativeness. The government has also realized the potential of manifestations in improving of their profile and the image of the host city as well as the country where the event occurs. It is also recognized the ability of organized events in attracting more visitors, which contributes to creating of economic benefits and the job creation. One of the most important impacts of tourism on the national economy is the revenue generated by organized events. In addition to the basic consumption at visits in an organized event, visitors visit the various sights in the host city, having additional expenses related to accommodations and other. Expenditures by tourists, and earned incomes, can have a significant impact on the local economy circulating therethrough as the revenue. An effective promotion of the destination through an organized event can result in extend length of stay of tourists, visiting other regional tourist destinations and their attractions.

In addition, the event itself may attract media attention and increase access to the destination that enhances the reputation (image) of the host city or tourist regions. Media exposures that successfully informed on event, may illustrate the quality of skills, innovation and achievements in relation to the host destination for the organizing of an event.

In terms of tourism, organized events cause many positive effects. Events have a major impact in diverting tourist trends with an attracting potential. Events influence on extending of tourist season, the average length of stay. Events increase

revenue of host cities in accordance to increases the needs for new quality labor, reducing the unemployment, strengthening the competitiveness of destinations, improving of qualities of living for locals.

Positive effects of organized events have a high value on a scale of tangible and intangible values. Developing the long-term strategies of tourism, these results are visible through the overall contribution to the national tourist economics. (Gračan, Rudančić - Lugaric, 2013).

### III. Empirical Research

The aim is to explore the impact of development of local event on the destination. Konavle as the municipality has 32 settlements where dominated both agriculture and tourism (Tourist Board of Konavle, 2016). Respondents as the target population were represented by the participants of this event, the host organizer, partners of the organizer, exhibitors, competitors and volunteers. In order to prove the hypothesis according to which H1: Elements of the local event as part of event tourism and cultural tourism impact on the identity of the micro-destination Konavle, empirical research was conducted on the basis of a survey on a sample of 60 respondents. An elementary unit research is the stakeholder of the local event.

#### A. The Research Methodology

Due to efficiency and more successful return of the number of filled questionnaires, the stakeholders were earlier contacted by by phone. Questionnaires were sent to them by e-mail. Number of returned, correctly filled questionnaires is 46, or 76.67%, which is a representative sample and it is sufficient for this type of of research. The composition of 10 issues (open and closed) is divided into three parts. The first one refers to the description of the profile, including general characteristics of respondents such as age, education and level of qualifications. Second part was presented with the specificities of participants of the local event (organizers, partners of organizers, exhibitors - family farms or some other type of association, volunteers), compared to their previous involvement and possible previous experiences in the rural tourism. The third issues refer to the assessment of competitiveness of stakeholders of local event, and the influence of elements of the event and rural tourism on the image of the destination development.

#### B. Results

By analyzing the demographic characteristics of respondents (Graph 1), it can be concluded that younger population dominates in the sample. The most frequent segment of the population are those from 18 to 26 years. As the age of the population increases, in such a way the percentage of older respondents declines.

Graph 1: Age of respondents

Source: Author's data processing

Graph 2 shows that the share of respondents with secondary school is 65.2%. This is more than one half of respondents.

2<sup>nd</sup> graph shows that age is not proportional to the variable of educational degree, which indicates inadequately trained personnel. This thesis can be justified by the fact that most respondents are young that are currently on colleges.

Graph 2 Qualifications of respondents (%)

Source: Author's data processing

Graph 3 shows the structure, the type of qualifications. It can be concluded that the largest part of the category are Others, which brings together many diverse professions. In accordance to the structure, the types of qualifications, it can be concluded that the largest part is the category - Others, which brings together many diverse professions. In the long run, even these "diversity" of qualifications is a good basis for further training of professional staff for the purpose of event tourism and of rural tourism. Results support the earlier experience of stakeholders in events and of their involvement in rural tourism (because the this specific event has arisen from created tourist product of rural tourism Konavle).

Graph 3 Sample structure with respect to the particular level of education (%)

Source: Author's data processing

Graph 4 Role of stakeholders and participants in the event

Source: Author's data processing

The biggest share (37%) include competitors of the Festival "Zelena Menestra and the wine", then volunteers, exhibitors (growers, olive oil producers and other registered family agriculture economies), the organizers and their partners. Due to the scope, the environment of an event itself and the micro-destination in which is being held, problems of clear defined roles of participants should be taken into account. This means that partially exhibitors and / or competitors are also practically part the organizing team. The turnout of volunteers and competitors indicates the popularity of events among locals. The significance of this event spreads, entrapping the increasing number of participants, during its maintenance. From last year, an attendance to this event has increased by 21.74%. 15,21% of total number of participants, participated in the first year.

Graph 5 Experience of stakeholders in rural tourism (%)

Source: Author's data processing

Findings point out (graph 5) that 80.4% of stakeholders had no previous experiences in rural tourism which confirms the thesis that on the location of Konavle is just developing a rural tourism as one of the specific forms of tourism. The share of 19.6% of respondents has the experience through the registered trades, in organizing the excursions in destinations, within memberships in cultural art societies for the promotion of heritage, tradition and values of Konavle, by participating in fairs, but also in the cultivation and processing of indigenous products.

Findings from graphs 6, 7, 8, 9 show levels of competitiveness of stakeholders of the event, without a "competitor" and due to the fact that with this question tried to assess the overall organization among which are the organizers, their partners, exhibitors and volunteers.

Graph 6: Assessment of competitiveness of event organizers as stakeholders, from 1 to 5 (1- noncompetitive, 5- extremely competitive)

Source: Author's data processing

Graph 7 An assessment of competitiveness of partner organisers as stakeholders

Source: Author's data processing

Graph 8 Assessment of competitiveness of exhibitors as stakeholders

Source: Author's data processing

Graph 9 Assessment of competitiveness of volunteers

Source: Author's data processing

Top-rated are volunteers and exhibitors, then the organizers and the partners organizations. There is no marks (1-2); either very unnoticeable. For the purposes of argumentation of results, stakeholders can be divided into two groups,

So may examine isolated organizers and partners (as leaders of the organizing team) from exhibitors and volunteers (as a team). Observed in this way, leaders of the organizing team have achieved very good results. The most common shared mark is 5 (very competitive), followed by 4, 3 and very insignificant percentage marks the second. These findings suggest successfully structured organizations by which all stakeholders of events are satisfied.

The remaining part of the organizing team, exhibitors and volunteers, are assessed mostly as a very competent what actually talking about their quality role in the overall organization. In such a way organizers and partners can be dissenting analyzed (as leaders of the organizing team) from exhibitors and volunteers (as a team). Observed in this way, leaders of the organizing team have achieved very good results. The most common joint score is 5 (very competitive), followed by 4, 3 and very insignificant percentage of the mark 2. These findings speak in favor of successfully structured organizations by which all stakeholders are are satisfied. The rest of organizing team, exhibitors and volunteers, are assessed mostly as very competent what actually speak of its quality role of overall organization.

Graph 10 An influence of local event on the destination development

Source: Author's data processing

Graph 10 shows the results of evaluating the impact of event tourism on destination development. For easier comprehension of issues, event tourism is defined in the context of marketing strategy aimed at implementation of potential economic benefits and values from events. From the results it can be concluded that event tourism has a role in development of destinations. This hypothesis is confirmed by 50% of respondents with a grade of an excellent, while slightly smaller percentages of respondents is assessed this hypothesis with a very good 32%, and 12% with - good. Graph 11 shows the results show an influence of local event on the image of destination

Graph 11 An influence of local event on the image of destination

Source: Author's data processing

Findings refer the impact of local event on the destination image are assessed by respondents are with an extreme impact (52.17%). Overall analyzed results create an image of a positive and successful impact on the further destination development and place identity, and thus on the image of Konavle as a micro-destination. From 46 of participants, 41 are engaged in activities that have contact with rural tourism. Here's coming to the interactivity, in accordance to the specific characteristics of two forms of selective tourism.

Graph 12 An assessment of influences of the local event on activities of Rural Associations (%)

Source: Author's data processing

Graph 12 shows the results of evaluating influence of local events, as a part of tourist product, on the economic activities around which respondents are involved. 41.5% of them assessed an influence as very good, 34.1% good, and 12.2% of them assessed it as an excellent mark. The reason for such small percentage of excellent ratings is a result of the tourist season, which affects the local area.

Rural tourism is influenced by the seasonality. Instead of throughout the whole year it is measured only a few months during the year. Despite excellent assessment, influence of local events is assessed as very good for activities of respondents, because events and economic activities are regarded as a part of tourism. Featured results confirm the hypothesis according to which elements of local events as part of cultural tourism, have an influence on the recognition of identity of Konavle as a micro-destination.

#### IV. Conclusion

New market trends affecting the profiling of new marketing niche. Tourists are more informed, with special preferences, more conscious in perception of the quality. Competitors compete with prices and qualities, including the innovative services in offer, with a focus on the emotions and experiences. They put pressure on tourism industry to create new products, services and experiences. With potential factors contained within the motives, the demand must be directed towards a specific selective offer. Using values of the destination and perceiving them as comparative advantages that are selected, created and offered as specific tourist products, we must assure the destination development and its improving that is under the sustainability concept.

Events are characterized by financial investments, limited time maintenance innovations, quality organization, a financial engagement, a limited time duration, careful planning. For the undisturbed implementation of planned topics of events, it is necessary to gather the organizational team. Each event is realized in interaction with the environment, which results in positive and negative effects in the destination host (on the local population, maintenance points) as well as business entities. Innovative modalities of tourism, that are dynamically experienced, are a response on the saturation of the standard products of mass tourism. Products such as events have advantages contained in the nature of events based on anthropogenic resources.

Sustainable socio attractions are the basis to the creation of and organization of events, as cultural-historical, ethno - social, artistic and the ambient activities. Positive characteristics of events are improving the living standards of local population through investments, the common participation of local stakeholders for public interests, and possibilities of presenting of cultural heritage of the local area, creating an image of the host destination. Service providers and others engaged in the organization of an event through perceived values and positive experiences of event participants promote their services. This research confirms the main hypothesis about the impact of the elements of the local event within the event tourism in

recognition enchanting. That argues that data refer on an increasing number of participants in the framework of this event Scents of Christmas as compared to 1 year maintenance. Although event tourism and rural tourism are defined separately, synergy is an incentive to encourage their further development of this region as a tourist destination. Thus, rural tourism is promoted in a manner that collects the autochthony of destinations. Maintenance of local events is important to create a positive image. Local events as innovations are still under development in Konavle

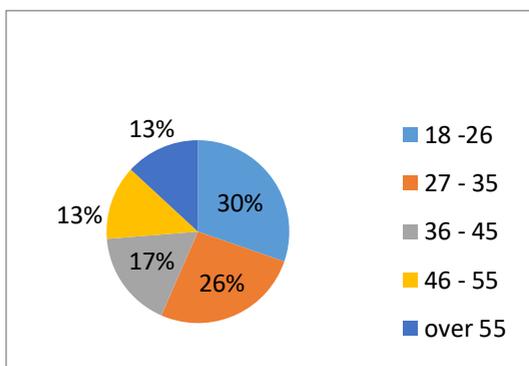
## References

- [1] AIEST (1987). *The role and impact of mega-events and attractions on regional and national tourism*, Vol. 28. St. Gallen, Switzerland: Editions AIEST.
- [2] Agritourism Konavle. Available: <http://www.agroturizam-konavle.hr/hr/udruga> Accessed: [March 12 2017].
- [3] Allen, J., O'Toole, W., Harris, R and McDonnell, I. (2005). *Festival and special event management 3<sup>rd</sup> ed.* Australia: John Wiley and Sons.
- [4] Allen, J., O'Toole, W., Harris, R and McDonnell, I. (2011). *Festival and special event management 5<sup>th</sup>ed.* Australia: John Wiley and Sons.
- [5] Bowdin, G., Allen, J., O'Toole, W., Harris, R. and McDonnell, I. (2006). *Events management 2<sup>nd</sup>ed.* Oxford: Elsevier
- [6] Brailo P. (1995). Ruralni turizam u okolici Dubrovnika, *Turizam*, 43(7-8):143-148
- [7] Burns, J. and Mules, T. (1989). An Economic evaluation of the Adelaide grand prix, In G. Syme, B. Shaw, D. Fenton, & W. Mueller (Eds.). *The planning and evaluation of Hallmark events* (pp. 172–185). Aldershot: GowerPublishing Co.
- [8] Čavlek N. , Kesar, O., Prebežac, D. and Bartolucci M. (2011), *Turizam- ekonomske osnove i organizacijski sustav*. Zagreb: Školska knjiga
- [9] CEPOR (2016). Izvješće o malim i srednjim poduzećima u Hrvatskoj – 2015. GEM – Global Entrepreneurship Monitor istraživanja za Hrvatsku za 2014. CEPOR – Centar za politiku razvoja malih i srednjih poduzeća i poduzetništva, ISSN 1848-3526, Zagreb, travanj 2016. Available: <http://www.cepor.hr/wp-content/uploads/2016/06/Cepor-izvjesce-2015-HR.pdf> Accessed [17 March 2017].
- [10] Coates, J.F., Mahaffie, J. B., Hines, A. (1997): *2025 Scenarios of US and global society reshaped science and technology*. Greensboro NC. : Oakhill Press. Allen, J., O'Toole, W., Harris, R and McDonnell, I. (2002). *Festival and special event management 2<sup>nd</sup>ed.* Australia, Milton: Wiley.
- [11] Douglas N., Douglas N, Derret R.; (2001), *Special Interest Tourism*. Australia: John Willey & Sons
- [12] Getz, D. (1989). Special events: Defining the product. *Tourism Management*, 10 (2): 135–137.
- [13] Getz, D. (2005). *Event management and event tourism*. New York: Cognizant Communication Corporation.
- [14] Getz, D. and Cheyne, J. (2002). Special event motives and behavior. In C. Ryan (Ed.). *The tourist experience 2<sup>nd</sup> ed.* (pp. 137–155). London: Continuum.
- [15] Getz, D. (2007). *Event Studies: Theory, research and policy for planned events*. UK: Elsevier.
- [16] Getz, D. (2008). Event tourism: Definition, evolution, and research, *Progress in Tourism Management. Tourism Management*. 29: 403–428.
- [17] Gračan, D., Rudančić – Lugarčić, A. (2013). *Konkurentnost turističke destinacije – studija slučaja (case study) Riječki karneval*, *Ekonomski vijesnik*, 26 (1): 271-282
- [18] Hiller, H. (2000). Mega-events, urban boosterism and growth strategies: An analysis of the objectives and legitimations of the Cape Town 2004 Olympic bid. *International Journal of Urban and Regional Research*. 24(2): 439–458.
- [19] Kesar O. (2012/2013), Uvod u specifične oblike turizma; Sveučilište u Zagrebu Ekonomski fakultet u Zagrebu Available: [http://web.efzg.hr/dok/TUR/Web\\_Uvod%20u%20specif%C4%8Dne%20oblike%20turizma.pdf](http://web.efzg.hr/dok/TUR/Web_Uvod%20u%20specif%C4%8Dne%20oblike%20turizma.pdf) Accessed [February 17 2017].
- [20] Mihajlović, I., Koncul, N. (2016). Changes in consumer behaviour – the challenges for providers of tourist services in the destination, *Economic Research-Ekonomska Istraživanja*, 29(1): 914 – 937: Taylor & Francis Group Routledge, (Online) Journal homepage: <http://dx.doi.org/10.1080/1331677X.2016.1206683>
- [21] Ministarstvo turizma Republike Hrvatske. Izračun prema statistika za 2016. Available:<http://mint.hr> Accessed: [17 March 2017].
- [22] Mossberg, L. (2000). Effects of events on destination image. In L. Mossberg (Ed.), *Evaluation of events: Scandinavian experiences* (pp. 30–46). New York: Cognizant Communication Corp.

[23] New Zealand Tourist and Publicity Department. (1987). New Zealand :Tourism Report No. 38 (November).  
 [24] Patkose, M., Stokes A. M. and Cook, S. D. (2003). *The historic/cultural traveller*. The Research Department of the Travel Industry Association of America: Washington, D.C.  
 [25] Ritchie J.R. B. (1984). Assessing the Impact of Hallmark Events: Conceptual and Research Issues, *Journal of Travel Research*. 23(1): 2-11  
 [26] Ritchie, J. R. B. and Beliveau, D. (1974). Hallmark events: An evaluation of a stratewgc response to seasonality in the travel market. *Journal of Travel Research*.14: 14–20.  
 [27] Roche, M. (2000). *Mega-events and modernity: Olympics and expos in the growth of global culture*. London: Roche, M. (2006). Mega-events and modernity revisited: Globalization and the case of the Olympics. *Sociological Review*. 54: 25–40.  
 [28] Turistička zajednica općine Konavle (2016). Available: <http://visit.cavtat-konavle.com/hr/konavle> Accesed [March 12 2017].

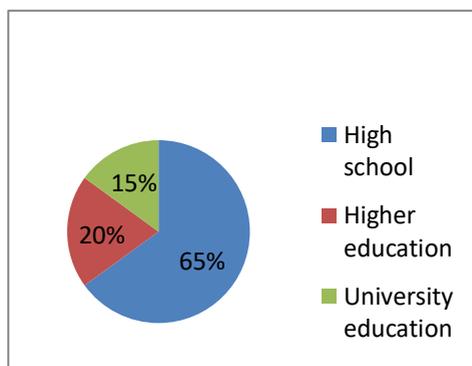
**Appendixes**

Graph 1 Age of repodents



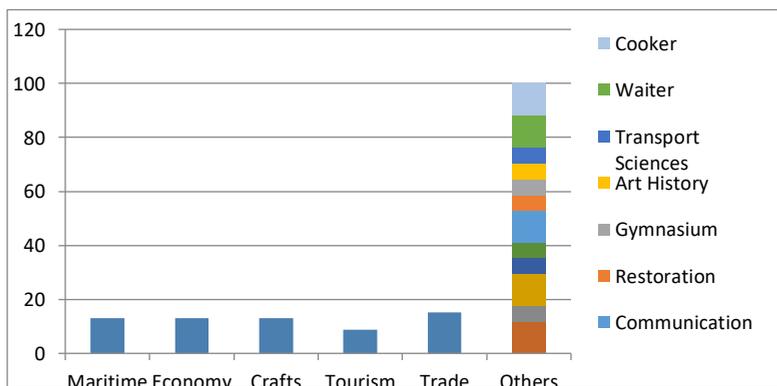
Source: Author's data pro

Graph 2 Qualifications of respondents (%)



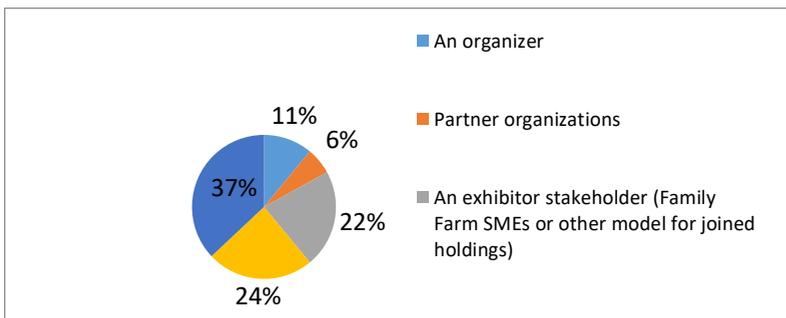
Source: Author's data processing

Graph 3 Sample structure with respect to the particular level of education (%).



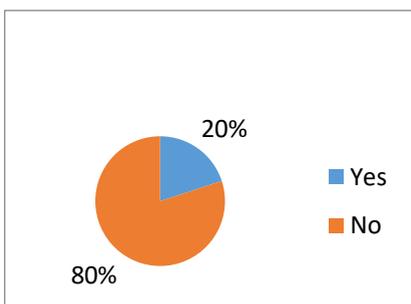
Source: Author's data processing

Graph 4 Role of stakeholders and participants in the event



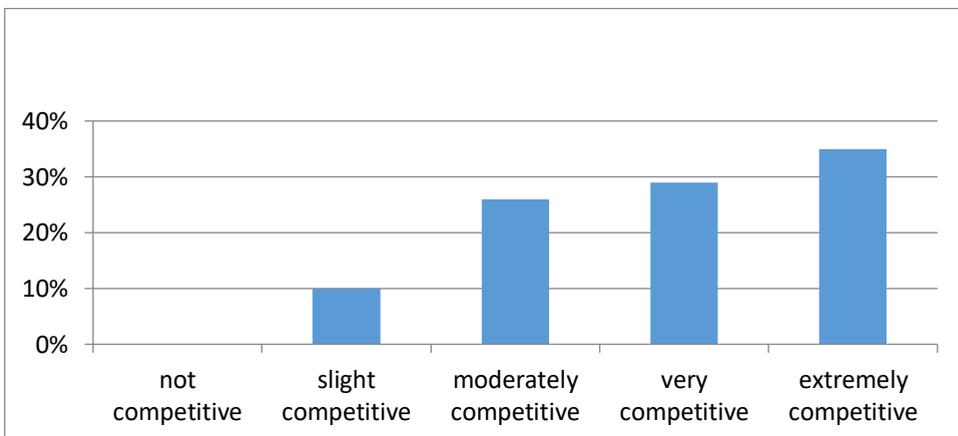
Source: Author's data processing

Graph 5 Experience of stakeholders in rural tourism (%)



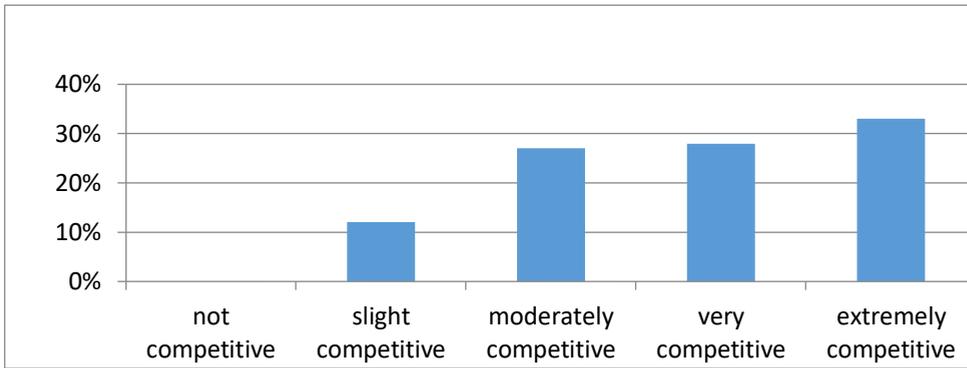
Source: Author's data processing

Graph 6 Assessment of competitiveness of event organizers as stakeholders , from 1 to 5 (1- noncompetitive, 5-extremely competitive)



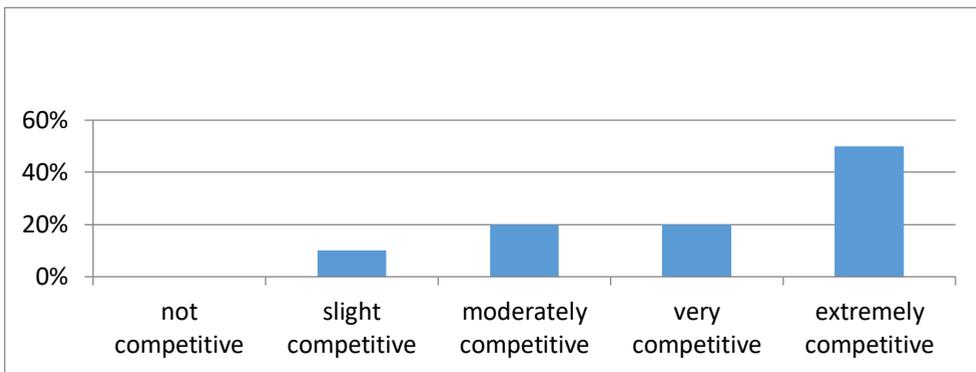
Source: Author's data processing

Graph 7 An assessment of competitiveness of partner organisers as stakeholders



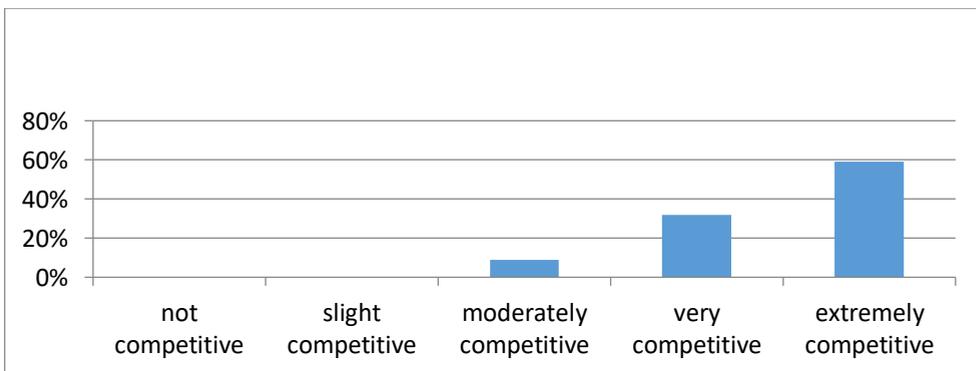
Source: Author's data processing

Graph 8 Assessment of competitiveness of exhibitors as stakeholders



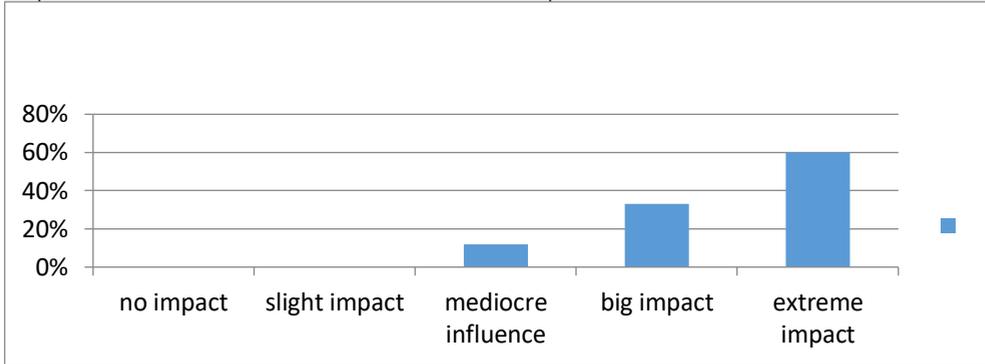
Source: Author's data processing

Graph 9 Assessment of competitiveness of volunteers



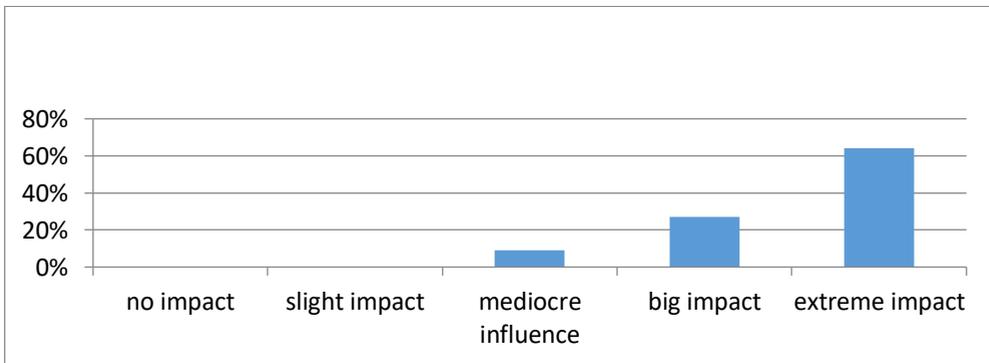
Source: Author's data processing

Graph 10 An influence of local event on the destination development



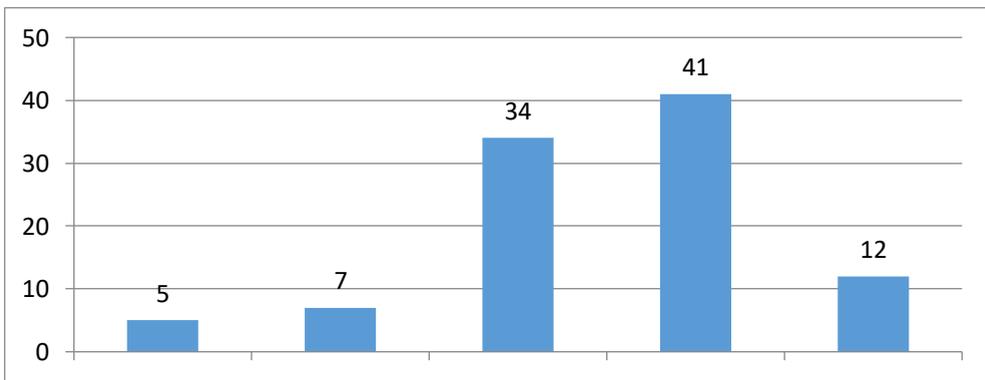
Source: Author's data processing

Graph 11 An influence of local event on the image of destination



Source: Author's data processing

Graph 12 An assessment of influences of the local event on activities of Rural Associations (%)



Source: Author's data processing

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## Regulation and Precariatization of Working Life

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### Abstract

- a paper submitted for the 13th International Conference on Social Sciences, Vienna 6-7 Oct. 2017. The regulation of labour market attachment and working conditions now appears to be a thoroughly cultural and political issue, which is just as much a subjection to compulsory flexibility in association with the deregulation of collectively attained rights. Precarious working life is an age-old form of exploitation, expanding in our days to the academic fields of communication work and knowledge work. Sum and Jessop offer an approach to the theoretical understanding of this current epoch. However, their leaning on Foucault together with information science and systems science set a decisive limit to any phenomenological perspective of cultural and political experience – and thus hamper their project of outlining a cultural political economy. Still, Sum and Jessop's important contribution to the notion of a cultural political economy must be recognized, not least when it comes to grasping the precariatization of academic knowledge work and communication work. In the contemporary era of global capitalism, regulation of work takes place in diverse regimes with new modes and objects of governance. Political economy has developed into a phase of globally networked capital, while the power and sovereignty of nation states have turned into an unstable matter. Struggles over the role of digital capital versus labour power dominate expanding domains of communication and knowledge. And individualization has become a widespread condition of labour markets as well as of the organization and performance of work. Social scientist like Castells (2010) and Beck (Beck & Beck-Gernsheim 2001) describe the new socioeconomic and sociocultural condition of global networks and exposed individual life. This new overall condition seems to constitute the framework for political and economic regulation as well as for social and cultural organization. Social networks and individualities are, however, anthropological structures and entities that can't be entirely subsumed under regimes of capital accumulation. Sociality and individuality adhere to the sociocultural 'flesh' and labour power, which include capabilities like existential freedom, creativity and structuring of meaning (cf. Keller 2013). Thus, a most crucial matter of the regulation of work is about the ways in which these existential capabilities are organized (collectively and individually) in praxis and institutions that reflect, of course, the pertinent relations of political and economic power. Social life has been conceptualized along such lines by Foucault. But he does not directly explicate the realities or formalities of the regulation of work. For that purpose we may turn to Jessop and Sum's critique of the regulation approach and their suggestion of a cultural political economy. On that basis, it is possible to point out the importance of the corporeal experience of social meaning that Foucault has helped us to conceive. This is a framework for focusing on the regulation of important aspects of work, such as professionalism, knowledge, and existential freedom, in the perspective of labour power, civil society, and movements of resistance. We appreciate the trans-disciplinary approach to cultural political economy that Sum and Jessop call for, and agree with them in insisting that the aspiration to transcend disciplinary borders should be anchored in ethnographic details of real-world problems and occupied with logically coherent concepts, methods and reasoning that include ontological as well as epistemological and methodological topics. The scope and depth of their theoretical research are admirable, in particular as to the conceptualization of the cultural domain as a fundamental structuration within the political economy, whereby the very notion of regulation is also changed from conventional descriptions of five basic structural forms – the wage relation, the enterprise form and competition, money and credit, the state, and the international regimes, which reflect the institutional configuration of Fordism – to distinction of the inherent contradictions of a particular growth regime, so as to approach Weber in highlighting elements of political capitalism and in particular to follow Foucault's notion of discursive formation of domination and hegemony through social technologies that configure into what he called "dispositives" (Sum & Jessop 2013: 208, 251). Taking on Foucault's micro-social perspective of social

technology as the practice of power and knowledge that shapes objective rules and norms together with subjectivity and identity, the macro-social perspectives of Marx and Gramsci are preserved and reformed as unfolding and concretizing the 'why' matters of regulation and governance, while Foucault only answers the 'how' questions (pp. 205-214, 478). However, this brings us to the crucial problems concerning the conception of politics and culture in association with the socio-technical matters of regulation and governance. Sum and Jessop seem to neglect that questions of 'why' address either functionalist, teleological, or hermeneutic ontologies and epistemologies all of which they are (in line with Foucault) struggling to avoid. Foucault clarifies how objective and subjective aspects of our social being are intertwined in the historical formation of meaningful structures of micro level practices and macro level institutions. But he is very foreign to the fundamental political and ethical concerns of freedom, lived experience and human life values, i.e. the entire phenomenological perspective that he knew well, partly incorporated as trivialities and partly refused strongly in his own thinking, and hopelessly attempted to reinvent in his last philosophical call for a new Socratic ethics. As it has been pointed out by Dreyfus & Rabinow (1983) and also Han (2002), Foucault is occupied with structure to the extent of implying 'regularities' that regulate themselves. He takes our lived understanding of social practices and discourses for granted without explicating it. Sum and Jessop apply information science and systems science concepts such as 'complexity' and 'selection' when it comes to basic notions of political and cultural ontology. This is quite unfortunate to their theoretical conception! They emphasize an existential or cultural 'necessity' of complexity reduction, which is what sense- and meaning-making (i.e. semiosis) is claimed to be about. The reduction of complexity is portrayed as fundamental to the lifeworld, lived experience, learning, and social imaginary that they take up as important aspects of the cultural being. Furthermore, the discursive and semiotic domain of meaning- and sense-making is discerned from the social reality, which is presented as a domain of material structuration. Thus, it is foundational to this cultural political economy that is places cultural semiosis on an equal ontological footing with the 'material' structuration of social relations and forms, as different but coupled forms of complexity reduction, whereby the evolution of new social order takes place through the three 'mechanisms' of variation, selection and retention. After all, human beings are construed as rational and computational actors who have to reduce complexity and make it calculable with certain codes and programmes that are associated with feeling, motives, etc. However, this is an altogether speculative ontology and anthropology! With that point of departure, there is hardly any political or cultural perspective with which to enhance Foucault's sociotechnical structuralism. Theoretical connection with people's actual experience of political and cultural matters is lacking. Foucault has emphasized that power – the influence on the actions of others – is only really interesting in so far as these others maintain their freedom and take on the foreign influence through one's own willed actions. In particular, this is true of the issues of individualization that are pertinent to the late modernity. The technologies of the self that Foucault uncovered in the culture-historical genealogy of the modern project of self-realization are also formed through the needle eye of individual consciousness and will, whereby they are sedimented as instituted meaning and interpretation that binds the individual through its own experience. Nevertheless, the general notion of 'social technologies' in Foucault always leaves entirely open the decisive cultural and political question of subject-object status: how the subjected subjectivity relates to the lived subjectivity, how the regulated social identity of the individual relates to the individual's regulation of one's own social identity. Existential freedom follows from a certain awareness and reflection that is not pre-given with immediate forms of human perception, expression and emotion. We are, therefore, to a considerable extent de-centered in our own experience and behaviour, which has its pre-personal and anonymous levels and dimensions, where we are subject to political and cultural conditions and processes but not acting as considerate and responsible persons who take a stand in politics or ethics. Hence, the important distinction between 'the political' and 'politics' has been unfolded by Lefort, Nancy and others. Sum and Jessop cogently analyze the notion of a knowledge-based economy and the quasi-commodification of knowledge and creativity as elements of the diffusion of neo-liberal policies. The knowledge-based economy is an imaginary regime of accumulation that has remained subordinate to the global rise of finance-dominated accumulation as well as its continuous crisis. Within the university sector in many European countries precarious employment relations and working conditions have become widespread through the latest decades, due to the neo-liberal policy of 'new public management' as well as the particularly feeble collective organization of university employed academics. In Denmark, for instance, a new university law in 2003 at a stroke substituted an ordinary enterprise organization for the academic and democratic forms of organization that has traditionally been characteristic to the

universities. This situation illuminates an important aspects of the cultural political economy of knowledge work, namely how the ubiquitous capitalist problematic of individualization is in play as precariatization of academic working life in the university sector.

## References

- [1] Beck, U. & E. Beck-Gernsheim (2001). *Individualization: Institutionalized Individualism and its Social and Political Consequences*. Sage Publications.
- [2] Castells, M. (2010). *The Rise of the Network Society. 2nd Ed.* Wiley-Blackwell
- [3] Dreyfus, H. & P. Rabinow (1983). *Michel Foucault: Beyond Structuralism and Hermeneutics*. University of Chicago Press.
- [4] Han, B. (2002). *Foucault's Critical Project*. Stanford University Press.
- [5] Keller, K.D (2013). 'Political Attitude in the Age of Globalization' in O.G. Augustin & C. Ydesen (Eds.): *Post-Crisis Perspectives: The Common and its Powers*. Peter Lang Edition.
- [6] Sum, N.-L. & B. Jessop (2013). *Towards a Cultural Political Economy*. Edward Elgar Publishing.

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## Reflections on the Environmental Impact Assessment Processes in Turkey

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### Abstract

Environmental Impact Assessment (EIA) process is a procedure that the environmental impacts of decisions on people, fauna and flora, soil, weather, climate, land, cultural heritage, etc. are taken into account before the decisions are made. Moreover, the EIA process has gradually been evolved to cover social aspects. However, Turkish legislation and implementation of EIA process seem to have significant problems when it comes to assessment of decisions on social aspects. This article will offer a critical account on the EIA process in Turkey with regard to the analysis of social impacts. The study will especially focus on whether the EIA reports in Turkey deal with the medium and long-term social impacts of the decisions in real terms and whether these reports have practical benefits in decision making processes. Moreover, the author will specifically ask whether EIA reports in Turkey assess the investments in terms of usefulness and sustainability. The main argument in this study is that those significant merits of the EIA process directly depend on the strength, efficiency and applicability of democratic participation mechanisms.

**Keywords:** Environmental Impact Assessment, Turkey, Social Impact Assessment, Democratic Participation, Sustainability

### Introduction

Environmental Impact Assessment (EIA) process is a procedure that the environmental impacts of decisions on people, fauna and flora, soil, weather, climate, land, cultural heritage, etc. are taken into account before the decisions are made. EIA is a process that has been evolved into its current state almost in the last four decades. There has been a growing interest in environmental issues, which focuses on the notion of sustainability and reaching to goals of economic development by establishing a harmony with environment. This awareness was reflected in legislation as well to regulate different activities in accordance with principles of environmental protection and prevention of associated problems. The role of European Commission in this process is decisive and the EIA process has been a major consequence and realization of this environmental awareness. Although there are many definitions existing in literature, the following definition is operational for our purposes:

EIA is a process, a systematic process that examines the environmental consequences of development actions, in advance. The emphasis, compared with many other mechanisms for environmental protection, is on prevention. Of course, planners have traditionally assessed the impacts of developments on the environment, but invariably not in the systematic, holistic and multidisciplinary way required by EIA (Glasson et al., 2005: 2).

Thus EIA as a systematic and holistic method not only specifies the possible environmental impacts of the projects but also deal with the ways to take measures to prevent these impacts. As Gilpin (2000: 4-5) states EIA not only investigates the "likely effects of a proposed policy, program, or project on the environment" but also it offers "alternatives to the proposal" and "measures to be adopted to protect the environment."

This paper aims to examine the environmental impact assessment processes in Turkey, which are regarded as one of the most effective tools globally in reducing environmental problems. EIA applications in Turkey will be examined in terms of legal processes and difficulties in implementation, and efforts will be made to understand how the EIA process has undergone a major transformation. In this context, one of the main objectives of the study is to explain the link between EIA processes and social factors. The EIA process appears to be a product of a sustainable development framework and a human-focused approach to the concept of ecology. Being also an academician, the author is a social impact assessment expert who has participated in various levels of EIA processes since 2000 in Turkey. Through this experience and

knowledge, it is examined how stakeholders perceive the problems in relevant legislation and difficulties in implementation in the EIA processes in this study. While addressing the structural problems in the EIA processes in Turkey, the author also examines the social awareness to the environment and the effects that this problem has on the EIA issues, which are as important as these structural problems. The main assumption of the study is that EIA processes in countries such as Turkey where social awareness to environmental problems are mostly perfunctory. In this context, even if the legislation on EIA processes is formulated flawlessly, structural problems arise in the implementation of these processes.

The fact that the EIA processes in Turkey are not developed through adequate environmental awareness does not mean that only the cultural and social structure can be blamed for the deficiencies and problems in the implementation and relevant legislation. Today, many environmental problems are resulted from the fact that policy makers tend to prioritize development in their choices between environment and development. The results of such decisions lead to environmental and social problems cannot be compensated in the future. Waiting for increased environmental awareness in the solution of ecological problems will lead to a number of problems that cannot be solved in the middle and long term. At this point, instead of policies that prioritize development, an understanding based on principles of sustainable environment must become dominant. It is necessary to examine the structure of the perception that is common in member countries of European Union that environmental constraints and individual interests are parallel phenomena. This would enable us to reveal the facts that prevent the formation of such perception in Turkey and to think about which the steps should be taken to form such a perception.

### **The Basic Principles of EU Environmental Policies**

There is no doubt that for European Union politicians, environmental problems are far more critical than the politicians of neighboring countries who are not members of the Union. The growing awareness of the environment in the EU countries, the increasingly stronger green movement, and the fact that these countries play a leading role in the international arena cause environmental problems to take more place on the public agenda. In member states of the European Union, environmental sensitivities play a decisive role in all political decisions taken about everyday life.

Increasing numbers of disasters such as floods, droughts, forest fires, the increase of carbon dioxide emissions from houses and transportation vehicles, the decrease in quality of life due to pollution and noise especially in urban settlements, and many other environmental problems have become increasingly part of everyday life in Europe as well as other industrialized regions. The fact that the European Union exhibits a minimum of a common political attitude against environmental problems stems from the existence of environmental problems that have become part of everyday life. On the other hand, the cost of eliminating environmental problems threatens the sustainability of economic activities. The most basic condition of economic sustainability has become environmental problems. In this sense, it has become compulsory for the countries of the Union to designate a common environmental policy or to develop a common view towards the environment.

As the scale of all economic sectors such as agriculture, industry, energy, tourism, transportation grows, the environmental problems increase and these problems undermine the economic activities that create them. Today, many researchers are clearly demonstrating a deep relationship between the economy and the environment. However, EU and European countries' policies and awareness towards environmental issues have also evolved from total negligence to an accentuated emphasis on environmental issues. For example, as Jordan (2005: 3) states the word "environment" was not found in the 1957 Treaty of Rome. He maintains that with the increasing environmental awareness in the late 1960s and early 1970s, the member states of European Economic Community have begun to work on environmental issues for better European integration especially in the 1972 United Nations Environment Conference in Stockholm. Consequently, European Commission first prepared the Programme of Action on Environment in 1973. Since then the member countries' emphasis on environment have increased both in terms of legislation and implementation of basic principles.

Although created by environmental sensitivities, the European Union's understanding of sustainable economy and environment is an understanding based entirely on the individual's growing needs and based on economic development. The acceptance of this political point of view by all the member states is primarily due to concern that economic competition should be fair. The environmental problems we face today must undoubtedly be addressed on a global scale beyond the national borders. However, the commonality of the views of the member states of a nuclear activity is related to the fact that the thorium clouds will not require any visa to cross the national borders between France and Britain, as well as a standard in the production costs of energy and creation of a competitive economic space in unity. This partnership does

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not mean only the protection of a cleaner environment and ecological equilibrium, but also the creation of a common and competitive market.

Moreover, the freedom of movement of capital, goods and people is mainly based on fair competition conditions to be provided within the European Union countries. In short, what makes the European Union a political, economic, cultural and environmental union is itself in the conditions of fair competition. In order for different political approaches to environmental problems not to be obstacles to fair competition, it is necessary to create a common environmental policy, common approaches and a social demand to support this policy. Today, the rise of the environmentalist social movements in the European Union countries in parallel with each other is based on a common market understanding as well as a movement to prevent environmental problems. Such a social demand is necessary to legitimize the additional costs that are created by the means to be used to solve environmental problems and which, in the end, must be paid by the citizens. This environmental demand will create common policies within the European Union that will be developed against environmental problems. These common policies, while raising environmental standards, will be the founders of fair competition as well. In short, environmental problems are caused by the unlimited needs of the individual. Individuals created an environmental perception at the point where the environmental problems threatened their daily lives. This perception has made it a political imperative to establish certain environmental standards. These standards ensure fair competition conditions that form the basis of the European Union. We can call this cycle a cycle of environmental awareness and economic interest.

When we look at the basic principles of the EU environmental policy, it is possible to see the cycle we are trying to convey above. The primary principle of the European Union's environmental policy is integration. Within this guideline, sustainable development is only possible with the harmonization of environmental protection measures with all the policies of the European Union. Integration requires that development be within the boundaries where it has not destroyed itself. With the integration principle, the individual is encouraged to make a request to exchange their short-term interests with their long-term interests. As Musu (2008: 3-4) maintains integration principle aims to integrate different dimensions to environmental policy: "legal, administrative, economic, and participatory." He asserts that the main aim of this principle is to "compare different possible instruments so as to use them in the most efficient way." The second principle is preventive principle, and this principle again emerges as one of the basic principles of sustainable development. Economic sustainability is more important than economic profitability in all circumstances. This principle, which aims to prevent environmental problems before they are created, excludes a self-destructive economic understanding. The cost of such exclusion requires citizens to pay the cost or walk in order to be able to see a beautiful landscape. An environmental policy, where everything is made easily accessible, is incompatible with the preventive principle. In order to eat in front of a beautiful landscape, it is necessary to walk or to pay a large amount of money. In both cases, the landscape will be less affected by human factors and preserved. Moreover, the preventive principle calls for ways to make an investment without causing the problem, rather than creating a problem and then solving it. The third principle is precaution principle. Precautionary principle emphasizes the unpredictability of environmental impacts. If there is a suspicion that an activity will have a negative impact on the environment, it aims to prevent the activity, even if it is not scientifically proven. The fourth principle is the "polluter pays" principle. If there is any damage occurred in any economic activity, the responsible party pay the costs of that particular activity. The last principle is the subsidiarity principle. This principle is based on the fact that the service is provided by the institution closest to the public. This principle, which places responsibility on local governments, emphasizes the complementary effect of the European Union. This principle, which states that local governments are responsible for environmental management, emphasizes the link between environmental issues and the social structure. However, this principle is also subject to many criticisms. As Glachant (2001: 13) maintains some interpreters consider this principle as having a weakening effect on EU environmental policy through which the EU's power on the scope of environmental issues could be restricted.

Environmental Impact Assessment processes have been the most basic environmental control agent that these principles have come to life. EIA processes can also be seen as the implementation area of these basic principles within the European Union. Even though these principles live with many agents in everyday life, EIA processes are the main source of these principles. It would be correct to say that these principles have shaped European Union EIA legislation in practice. As Löber (2011: 44) stated EIA has a novel approach to the environmental issues at hand:

EIA ... seek to overcome the vertical approach to environmental issues, i.e. the goal was to integrate environmental policies into other policy fields. They require that environmental issues be considered across all sectors; previously, problem solving

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remained strictly within the borders of the addressed sectors. This vertical policy-style could not consider the environment as a whole, thus measures to solve one problem often had adverse effects on other environmental issues.

Moreover, the prerequisite for these principles to survive in EIA implementation is the public pressure to ensure that these principles are implemented correctly and are included in legislation. In order for this kind of public opinion to be formed within the framework of individual preferences, it is primarily necessary for the individual to develop a medium- and long-term perspective that prioritize environment over development. This is fundamental to determining the legal framework and the effectiveness of the EIA processes.

### **Some Problems of the EIA Processes in Turkey**

The legal source of EIA processes in Turkey is the EIA directive, which has undergone 17 major and minor changes from 1993 to 2017 in total. According to a statement made by the Chamber of Environmental Engineers, the EIA directive, published in the European Union in 1985, has only been amended three times. This can even be seen as a proof of the perfunctory nature of the EIA processes in Turkey, which inevitably generates the lack of interest in fighting environmental problems and in environmental protection. When the concept of EIA first emerges in Turkey, it can be seen that the legal regulations in this area are far from aiming to balance the environment and the economy and to realize the basic principles we consider above. EIA first entered environmental legislation in August 1983 with Article 10 of the Environmental Law No. 2872. However, the EIA Regulation has been published only after 7 February 1993, almost 10 years later in various negligence and delays. With the provisional Article 3 of the first published Directive, the projects for which approval, license, permit, and expropriation decisions were taken before the enactment of EIA Regulation of February 1993 were exempted from the EIA process. A legal gap has been created for this 10-year delay: The projects of which the implementation projects have been approved, or a permit, license or approval or expropriation decision has been taken from competent authorities in accordance with the Environmental Legislation and other relevant legislation (or has been selected in accordance with the relevant legislation, activities taken) prior to 7 February 1993 were exempted from the EIA process.

Furthermore, when we look at the amendments made in the directive over the years, it is possible to say that the EIA directive has gradually moved away from the five principles we have listed above. The results of policies by political governments that make the EIA process an "obstacle" in front of the investor and interpret the environmental protection-use balance by prioritizing "use" principle are also consistent with the EIA statistics of the Ministry of Environment and Urbanization. The number of projects evaluated between 1993-2012, which had positive EIA decision was 2,792. The number of projects for which the EIA is not required decision is 39,649. The number of projects which had negative EIA decision is only 32. In this sense, the EIA processes have ceased to be processes that will provide the basic conditions of a sustainable ecology and a sustainable economy that will balance ecology and economy in both practical and legal senses. This is confirmed by the European Union official report of 2016 (European Union, 2016). Moreover as many commentators point out, there are important problems related with the qualifications of the people and establishments that prepare EIA reports in Turkey (2010: 132). There are also many shortcomings in the preparation of the EIA reports which conflict with the requirements and methodology of the EIA process. As Ürker (2012: 73) states Environmental Consultancy companies, especially those who prepare EIA reports and complete the related procedures, can prepare reports in a very short time with the encouraging of the related ministries, by copy paste plagiarism without even seeing the project area. The Ministry of Environment and Urbanization, which has the authority to supervise and make decisions about the relevant processes and reports, encourages the urgent realization of the projects rather than putting emphasis on the issue of the protection of environment.

Showing many indications of the imbalance between economy and ecology, Turkey has recently become one of the countries increasing the rate of pollution the fastest, while attaining high figures in terms of economic indicators. However, this phenomenon cannot be said to increase environmental awareness. The number of individuals in Turkey who have to make a choice between economy and ecology and prioritize ecological concerns is very limited. Such inquiries are widespread among environmental groups that are marginalized by the vast majority of the population. The problems arising from the fact that natural equilibrium is sacrificed to economic growth have been concern only to a limited number of environmentalists, sensitive groups, experts, etc. The reasons for this situation is populist policies as well as excessive specialization in the academy and the fact that Turkey does not have a economic and social structure enough to support strong environmentalist political attitude. It is not possible to talk about a strong environmentalist movement or a formation that will bring ecological problems to the public agenda in Turkey. Though there are small local groups that sometimes take a stand against specific projects, they cannot form a national agenda in general, or the national level of environmental

awareness they have created is very short. It is possible to relate these irresponsibility or lack of interest in ecological problems to many factors in Turkish society. However, the most fundamental of these is the fact that due to high level of economic development differences between regions, ecological awareness cannot take precedence over concerns of economic development. According to the results of Kadir Has University Social-Political Trends Survey held in 2016, Turkey's biggest problem is seen as terrorism.<sup>1</sup> Unemployment and high cost of living are also at the top of the problems that are seen as important. Interestingly, environmental problems have not even taken place as a category in this research. Even this observation reveals the inadequacy of environmental awareness in the Turkish society. In addition, 71.7 percent of the respondents said that there was an economic crisis in Turkey. According to a research conducted by the Konsensus research company in 2017,<sup>2</sup> the percentage of respondents who regarded environmental problems as one of the most fundamental problems of Turkey is only 2%, and thus environmental problems seem to be the least important problems. Again in the same survey, unemployment is second with 40%, inequality in income distribution is fourth with a 23% and inflation / life cost is fifth with 21%.

These numbers suggest that when there are problems that are seen more vital by the society, a sufficient level of environmental awareness is not possible. In 1972 Stockholm Human Environment Conference, Indira Gandhi voiced a similar statement: "There are grave misgivings that the discussion on ecology may be designed to distract attention from the problems of war and poverty". And she continues: "Are not poverty and need the greatest polluters?"<sup>3</sup> On October 30, 1984, a statement by the Minister of Culture and Tourism of the Republic of Turkey defended the same view: "Thinking about environmental problems to us is like necktie to a porter. Foreign experts say that if your income per capita is not at least \$ 7-8 thousand, thinking about environmental pollution is a luxury for you".<sup>4</sup> Since 1972, it is not hard to predict that the biggest problem in India is still poverty. However, for Turkey, where per capita income is close to 10,000 dollars, it is not understandable that concern for environmental problems is still seen as luxury. In the last 33 years, we are still observing that environmental sensitivities are not sufficient in Turkey. In a country that is late in the process of industrialization and urbanization and having difficulties in the functioning of its political system, it can be seen natural that ecological problems are not regarded as one of the main problems. But this will inevitably lead to worrying problems in the long run. Duru (2013: 5) mentions the relationship between urbanization and the development of environmental awareness:

There are important links between the fact that we are late in the urbanization process ... and the underdevelopment of green movement in our country. From this point of view, it can be suggested that the problems arising from the coexistence of a large number of people in a small space recently begin to emerge. Topics such as traffic, garbage are only a problem on the agenda of one or two latest generations. In short, late emergence of such problems might be said to cause the delay in taking common action for solution and the emergence of strong environmentalist movements.

Thus, as many commentator states, "environmental concern is related to personal memory." (Hussey and Thompson, 2000: 3) The delayed urbanization and industrialization in Turkey has caused the rural to be always remembered with backwardness and the identification of industrial investments, bridges, dams and many urban facilities with modernity and development. This perception hinders the development of environmental consciousness that questions urban facilities in the long run. In Turkey, the analysis of the politicians' responses to the groups that oppose the projects that may cause environmental problems, or bring these projects to the public agenda is very illuminating. These responses are also an expression of the late urbanized and industrialized Turkish society, longing for cities with large, wide streets. It is not possible to expect children of a generation who used to live in villages without roads, carry patients to the hospitals on their back, work in candle light to show ecological awareness to a gigantic hydroelectric power plant or a major highway project. This perception of backwardness in Turkish society leads to the definition of EIA processes as meaningless and useless by the individuals.

## Conclusion

The basic condition for the realization of European Union's five basic principles of EIA processes is the change of the individual's view of environmental problems. Unless the environmental demands of the individual are expressible, it seems very difficult to realize these five basic principles in both legal sense and practical sense. Increasing the awareness of

<sup>1</sup> <http://www.khas.edu.tr/news/1498>

<sup>2</sup> <http://www.konsensus.com.tr/turkiyenin-en-onemli-sorunlari/>

<sup>3</sup> <https://www.theguardian.com/global-development-professionals-network/2014/may/06/indira-gandhi-india-climate-change>

<sup>4</sup> <http://www.cumhuriyetarsivi.com/katalog/192/sayfa/1984/11/10/7.xhtml>

individuals to environmental problems is the most fundamental condition that will bring EIA processes in Turkey out of its perfunctory state. Individuals' environmental demands will be both a challenging element for politicians, and create a basis for an environmental rationality for the private sector. Individuals involved in EIA processes and involved in these processes as an element of resistance with ecological sensitivities will lead the private sector to gain an environmental rationality. One or several EIA reports that are canceled as a result of social reactions would ensure that both political decision-makers and the private sector gain environmental awareness. In order to make people with medium- and long-term concerns for environment effective in EIA processes, it is necessary for environmental groups in Turkey to work on the current social problems of today and develop an approach dealing with local needs, not global ones. However, as we stressed earlier, due to Turkey's unique structural problems, explaining EIA processes solely through environmental issues or the protection of nature will make it difficult for individuals to adopt the principles of the process.

Participation in the EIA processes will increase as the EIA process is linked to the individual's daily life. Defining EIA processes as a solution to more local, more familiar problems such as poverty, shelter, and drought, instead of a distant, foreign issue, where people do not feel individual impacts, such as climate change would make the process more efficient and understandable for people. It can be said that nuclear power plant projects, urban transformation implementations, hydroelectric power plant constructions and mine exploration activities are increasingly faced with more social resistance in recent years in Turkey. But this reaction is far from being an expression of a general ecological resistance. It is clear that main concern of people who have taken action against the construction, mining and energy investments is more the damage to their vital sources and the intervention to their living spaces rather than the environmental problems associated with these projects. Similarly, the basic reason for the increasing involvement of the local people and the villagers in the EIA processes in recent years is also related with their more practical needs. The question of whether it is possible to create an individual that emphasizes ecological concerns from such resistance is an important question. The best way for making the citizens to understand that it is also economically beneficial to deal with ecological problems, even if not in the short run, is to make the EIA processes compatible with the five basic principles of the European Union.

## References

- [1] Dervişoğlu, Suat (2011). "AB Müktesebatına Uyum Sürecinde Çevresel Etki Değerlendirmesi (ÇED)." *Türk İdare Dergisi* 467: 115-134.
- [2] Duru, Bülent (2013) "Türkiye'de Yeşiller Hareketinin 'Sürdürülebilirliği'". *Perspectives* 3: 4-7.
- [3] European Union (2016). *Commission Staff Working Document: Turkey 2016 Report*. Brussels.
- [4] Gilpin, Alan (2000). *Environmental Impact Assessment: Cutting Edge for the Twenty-First Century*. Hong Kong: Cambridge University Press.
- [5] Glachant, Matthieu (2008). "The Implementation of the Environmental Policy in the European Union Context." In *Implementing European Environmental Policy: The Impacts of Directives in the Member States*, ed. Matthieu Glachant. Cheltenham, UK: Edward Elgar.
- [6] Glasson, John, Therivel, Riki, and Chadwick, Andrew (2005). *Introduction to Environmental Impact Assessment*. London and New York: Routledge.
- [7] Hussey, Stephen and Paul, Thompson (2000). *The Roots of Environmental Consciousness*. London and New York: Routledge.
- [8] Jordan, Andrew (2005). *Environmental Policy in the European Union: Actors, Institutions and Processes*. London: Earthscan.
- [9] Löber, Sonja (2011). "The Place of Knowledge in Policy-Making Processes: An Assessment of Three EU Environmental Policy Instruments." In *Sustainability of European Environmental Policy: Challenges of Governance and Knowledge*, eds. Rob Atkinson, Georgios Terizakis, and Karsten Zimmerman. London and New York: Routledge.
- [10] Musu, Ignazio (2008). "Integrated Environmental Policy in the European Union." In *Sustainable Development and Environmental Management: Experiences and Case Studies*, eds. Corrado Clini, Ignazio Musu, and Maria L. Gullino. Dordrecht: Springer.
- [11] Ürker, Okan (2012). "Türkiye'de Hidroelektrik Santraller'in Durumu (HES'ler) ve Çevre Politikaları Bağlamında Değerlendirilmesi." *Ankara Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 3(2): 65-88.

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## The impact of cultural intelligence in an international company – 2<sup>st</sup> level survey

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### Abstract

Different cultures – different language – different names – different behaviors. In literature, different cultures are mostly described between continents and borders. International companies reach their limits in implementing new top down strategy to all subsidiaries across the planet. Different work methods in different areas and even in different departments can frustrate the responsible international manager. Cultural intelligence can help to minimize the storming time and loss of efficiency of new international teams. Good trained managers (on Cultural Intelligence) do at least speak a view words of the language of the new colleagues and pronounce the names of the team members in the right way. In the first part of the paper it was examined how biased people can be if they hear foreign names. Names even can decide on if someone gets a job or not. The 2<sup>nd</sup> part of the survey carried on the examination of the cultural differences within a company. The 1<sup>st</sup> part was done with respondents from different companies. It is interesting to know, especially for the managers, how the employees feel and think. How they work and how they prefer to communicate. The 2<sup>nd</sup> part describes the 1<sup>st</sup> survey, consists of a sequence of four steps which will be performed within the group. In total 28 companies are parts of the group on three continents (Europe, Asia and America).

**Keywords:** Cross cultural management, cultural intelligence, globalization, international business, international management

**JEL Classification:** F02, F23, F42, P45

### Introduction

First Part: In every culture people give names to their children. More or less of them have meanings in their culture. Names are very individual salutations between human beings. A time it is difficult to pronounce the name in the right way. But the right spelling shows the respect to your communication partner. And how biased are we, when we hear a name without having a face to it? Do we imagine a face to a specific name? Do individual with foreign names have difficulties to get a specific job? The survey was performed between the 1<sup>st</sup> of May and 10<sup>th</sup> of May 2017. In total 11 questions in relation to names were asked.

Second Part: This part was the continuation of the survey “Step 1”. The second step describes the cultural differences within a company. The survey was performed within the two companies (one in Germany and one in Austria) which are under the same holding. The aim is to find out how big the cultural differences between these two companies are. Both companies have similarities like same business type, sharing the same name, speak the same language, bordering each other and are part of a bigger holding. Is that enough to share the same company culture? If not, how big are the differences? The survey was performed in Austria in July 2017. In total 26 questions were asked. Six questions are added compared to the Step 1. In total 18 filled questionnaires were collected and 44 were sent to potential respondents. The response rate was 40.1%. Statistical evaluations were done in both parts with SPSS.

### Meaning of Names

All over the world and through all culture human have names (Le Rouzic, 2000). A name gives us a unique personality and separates us from the rest of the herd. In the region where human grow up names always sounds familiar because we hear them every day. In other regions and countries different names appear in the linguistic pronunciations. For foreigners sound the new names somehow strange because it is something new. Something new or new cultural behavior (misunderstanding, behavior pattern ...) can lead into fear or rejection of the new culture (Flader, 2008). A cultural shock

can cause sickness and the wish of something familiar and if it's just to hear the native language. A cultural shock works as follows. Phase 1: Euphoria – a lot of new impressions and new language makes the human happy. Phase 2: Alienation – the starting high spirit evaporate. Too many changes at once. Phase 3: Escalation of Alienation – want to reject the cultural. Why the locals do it this way and not our ways? Phase 4: Cultural Learning and partial adaption of the new live style (Flader, 2008). As soon as the human accept the new situation the faster the new lifestyle will eliminate the cultural shock. As every behavior has its origin also names have an origin and also a meaning. Cicero, for example will be chosen because we can't pronounce Socrates, is from the Latin "cicer", which means chickpea. Chickpea is a kind of vegetable. Curtis, another English name, means "short leggings". Let's be honest, no one wants to see a guy in capris (Hayes, 2013). If a name means something terrible or something good – names have a meaning.

What will happen if in your usual environment new people from abroad move in? Different names are on the door bell which locals can't even pronounce. The first part of the survey tries to find out how people act when they hear foreign names.

### Corporate Culture

Each and every human has its own culture. Every individual is thus simultaneously a member of several cultures: for example, a physicist at Harvard University, of German origin and German mother tongue, having acquired US citizenship, would have at least five identities to reconcile in everyday life (Arlt, 2009). In a company many people work closely together and share offices with other colleagues. In that kind of environment it's important to respect mutually and to reduce the own wishes. Cultural differences can cause easily troubles within a group of employees. Especially when two companies merge corporate culture is substantial for a good performance. If it's not taken care of, workers create either active or passive resistance against the new situation. Special attention should be on a rise of resignations, on higher sick leaves and productivity (Wirtz, 2003). Basically we understand the term "Culture" like thinking in patterns, value standard and forms of interaction between humans in their natural and social environment (in comparison to Krystek, 1992).

Corporate Culture is defined "as the entirety in a company existing either aware or unaware cultivated, symbolic and linguistic values, thinking pattern and code of conduct (in comparison to Ulrich, 1993). When new colleagues are hired change the corporate culture with their own characteristics – mostly unconscious.

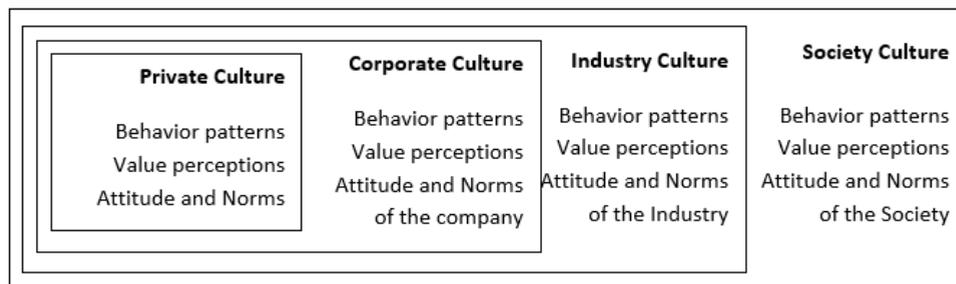


Figure 1: Corporate Culture and their surrounding Cultures (Bleicher, 1991)

It is seen in the figure 1 that the private culture is the nearest area. It reflects how humans are raised. Children learn very fast from other people who are close to them. Lived tradition and values will be hand over to the next generation at home. These learned behavior patterns will be used in school and at work. When parents trained their child to be polite to others the youth will rarely misbehave in school or at work.

Every company has its own corporate culture. If the lived culture is good or not depends on perspective of the observer. Japanese corporate culture for example dates back to the post-world war time. The culture in Japan is in a changing phase (Rothlauf, 1999). The cultural differences will be mostly used when westernized Managers fail in business in Japan (Niesen, 2014). Statements like: "the Japanese corporate culture is just different like ours." will be used to explain the unavoidable. The basic need of the Japanese people is to contribute to the harmony of the society and they workforce only function when at least a minimum of harmony is available. That's why manager should avoid criticizing colleagues directly (Rothlauf, 1999) – which is in our corporate culture common practice. The ability is high that the corporate culture will be the scapegoat

when companies go through hard times, which can end up in insolvency. Symptoms of corporate relevant topics are for example (Homma, 2014):

*A high fluctuation of highly qualified and/or normal workers.*

*The leadership style of some managers will lead to frustration and tensions of the employees.*

*The time of response on customer enquiries are too long and cause critics.*

*The organization is busy with themselves instead with the customer.*

*High sick days – compared in the sector.*

*In some departments distrust and lack of cooperation are discovered.*

Every individual add a small part to the corporate culture with the private culture. For leaders especially important is to be aware of the role they show to the work force. If the leader / manager are inaccurate the employees will be mostly too.

The culture of some industries is even seen from outstanding people. For example the hotel and tourism industry is known that it's a tough job with lots of hours, working on weekend, high stress during season and the communication does not have a nice way. In this industry only workers who can bear or be part of that culture will survive for a longer time. In other words each industry sector has its own culture and only people who like the work environment work there.

The more people come together the more diversity is seen. Tyler amplifies: "Culture is that complex whole which includes knowledge, belief, art, morals, law, customs and any other capabilities and habits acquired by man as a member of society" in the year 1871. A lot of external influences shape our view and opinion. When you ask people to introduce themselves to others, their answers will look like this: I'm Jim. I work in accounting. I take care of all the payroll paperwork. Mostly I work with the lawnmower and small engine division, but I'm beginning to work more with the flowerpot division (Peterson, 2004). They mostly identify themselves with work or with a soccer club or a nation / region. You will find rarely people who talk about their private life, where they come from and so on. Especially at the start of a conversation with strangers. The best way to break through insularity and explore more about a culture of a society is to buy only a one way ticket to Burundi in the middle of Africa. Just to be kind to give them a liter of fresh drinking water for their arrival there. So if they ever wanted to make it home, they would be absolutely obliged to interact with someone incredibly different from themselves. They would be forced to learn a bit of a foreign language, to use body language, to modify their communication style, to listen attentively, to keep an open mind and in general to undergo a bit of cultural evolution ... or never get home (Peterson, 2004).

### **Change the Cultural Aspects**

As we know, the cultural of every individual took years to improve. To change private culture, embossed through the years, is very difficult. Only open minded people who accept differences will see the world from other perspectives.

This fact should be known by managers, who announce a culture change for their company. They have to accept that a planned cultural change takes years rather than months, and that culture is in any case changing all the time irrespective of any plans to change it (Stanford, 2010). A corporate organization is a kind of living organism. Workers leave the company and new worker with their private culture imprinting will be hired. All of them contribute and change to the corporate culture with time. It is even necessary for managers who want to change work habits / culture to cancel work contracts and hire new people who will fit into the new company organization.

The more universal the culture is the more difficult or almost impossible is to change the culture. Migrants are seen as one big factor to change the culture of a society. It's not the religion alone also their previous lifestyle collides with the existing culture. It will take decades to finally know in which area the culture changed in which extend (Vertovec, 2015).

### **Overview of the Survey**

The survey has 5 steps. The first step was took place between March and May 2017 and explored the cultural intelligence of different respondents who don't work in the same company. This survey was done to get the first impression about cultural intelligence from young professionals. The second step was divided into two parts. The 1<sup>st</sup> part explored the situation about foreign names and the 2<sup>nd</sup> part was performed in one business unit of an energy supply company (in this

case - Austria). The focus was on cultural differences within a business unite (between departments). The steps 1 & 2 and the steps 4 & 5 will be performed as online surveys. Step 3 will be performed as quality interview. A qualitative interview is the best way to get the real opinion of the managers in the headquarter and to read in between the lines.

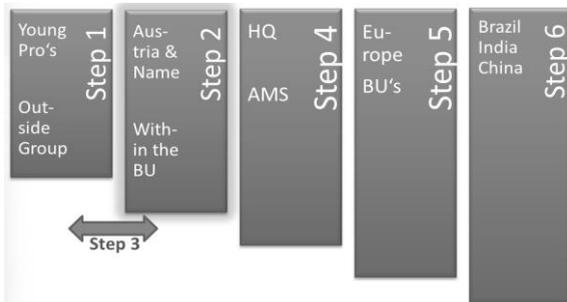


Figure 2: Steps of the survey

Source: Own diagram

Overview of the Online Survey – Names

The goal of this survey was to find out if people biased when they hear a foreign name without knowing the person and also without a photo. Do people categorize names regarding their own cultural impressing? The online survey was performed between the 1<sup>st</sup> of May and 10<sup>th</sup> of May 2017. All together 169 started the survey and in total 126 finished the survey with 11 questions. The survey has a completion rate of 74.56%. The origin of the names (in total 6) were Austria (2x), Uganda (2x), Arabic (1x) and Tanzania (1x).

Names used	Female	Male
Namibia	Jennifer Shekupe Nkosazana	Charles Tale Mosegi
Austria	Katharina maier	Markus Kofler
Uganda		Kagizo Tebogo
Arabic		Ibrahim Alhamad

Figure 3: Names used Source: Own diagram

Result of the Survey - Names

The 1<sup>st</sup> question was about the gender. All common names were proper classified. Even the names from Namibia were chosen right dou to the common first names – Jennifer and Charles. The only name which confused the respondents was the Ugandan name Kagizo Tebogo. In this case the baptismal name was removed. Only 70.75% chose the correct gender. The given name is necessary to identify the gender of a person. In this case the first name was not known well by the respondents (see figure 4). The 2<sup>nd</sup> question is about the mother tongue of the names. The following languages were available: German, Chinese, Arabic, Africans and French. To choose the right language is difficult due to migration background. The language for the Austrian names was selected up to 99.32% (both) correctly. 93.06% selected the Arabic name correctly. In figure 5 it is seen that the Ugandan name was selected up to 72.79% for African language. Compared to the other two African names where the female got 59.72% and the male 32.19% correct selection is the result of the Ugandan name due to the fact that when the names comprised a Christian name it might be possible that they live abroad or in one of the former colonies of the European powers.

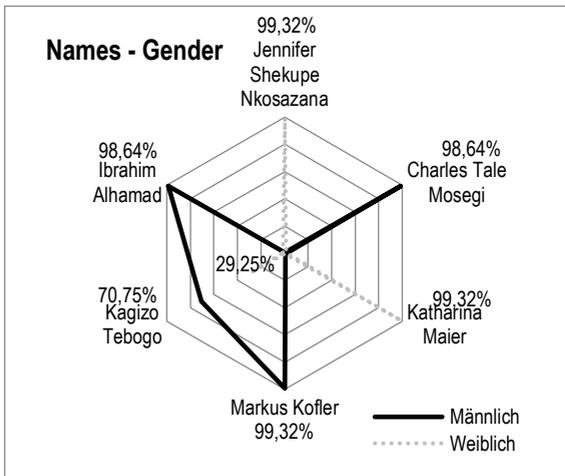


Figure 4: Names – Gender Source: Own diagram

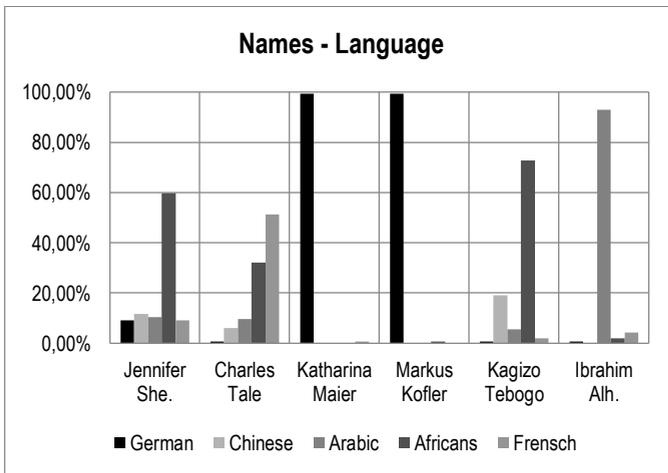


Figure 5: Names – Language Source: Own diagram

Charles Tale confused the respondents the most. The highest selected language was French with 51.37% compared with 9.03% for Jennifer Shekupe. The Chinese language only was selected high only with the name Kagizo Tebogo with 19.05%.

The result of the ethnic origin of the names is shown in figure 6. It is clear for the respondents that the Austrian names are up to 99. 22% (both) European origin. Also the Arabic name was selected up to 93. 02% as Arabic origin. The Ugandan name (Kagizo Tebogo) was selected correctly by up to 68. 99% (African origin). Only the two names with Christian names were difficult to categorize. Even Oceania was selected up to 10. 16%. The African origin was selected at both names the highest. For the female 46. 88% and for the male 37. 30% selected correctly.

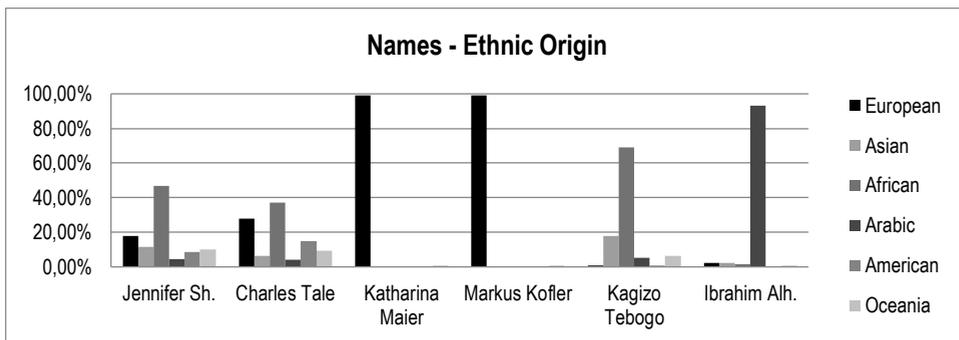


Figure 6: Names – Ethnic Origin Source: Own diagram

The next question discusses the environmental protection. It is know that in developed Arabic countries energy plays a subordinate role. When countries have enough energy to even export it, the citizen will not take care and think about environmental protection. Accordingly is the result. The highest environment protection score got the Austrian names opposed the fewest score got the Arabic name. Females got higher scores rather than males.

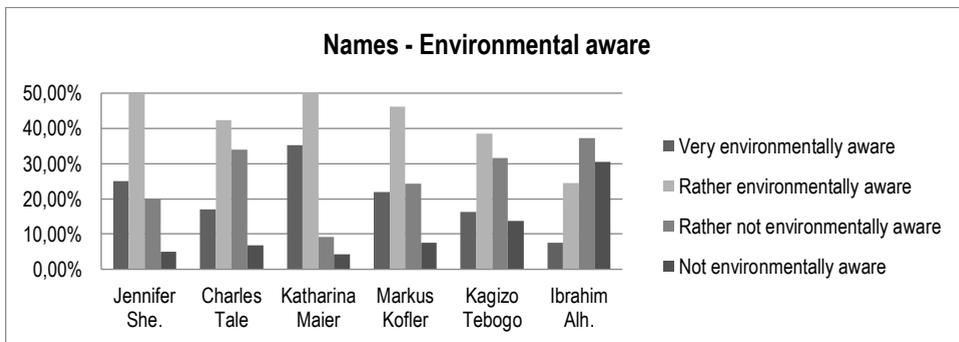


Figure 7: Names – Environmental aware Source: Own diagram

In societies hobbies play a big role. Every culture has its own favorite sports / hobbies / activities. British like Cricket, Rugby and Soccer. Americans like American Football and the Germans favorite sports are soccer (Evivam, 2017). But when people hear foreign names, to they associate it with local or with exotic hobbies. To the selection six activities and no activities was available. Activities were swimming, climbing, hiking, betting, cultural activities and charitable work.

Multiple answers were possible.

	Jennifer She.	Charles Tale	Katharina Maier	Markus Kofler	Kagizo Tebogo	Ibrahim Alh.
Swimming	72	60	83	70	53	48
Climbing	53	50	69	82	49	47
Hiking	56	61	81	79	51	47
Charitable activities	72	58	71	58	59	53
Betting	29	43	41	53	39	53
Cultural activities	77	69	74	62	65	66
No activities	16	18	14	15	24	23
Total	375	359	433	419	340	337

Figure 8: Names – Hobbies Source: Own diagram

Unknown names are more associated with cultural activities. The highest scores got the Austrian female (433) and male (419). The second highest scores got the names from Namibia (incl. Christian names) and the fewest scores got the foreign names without Christian name and the Arabic name. The respondents are probably sure about the local activities. The females (African and Austrian) have the highest scores in cultural activities. The highest score in betting got the Arabic name as the second highest score behind cultural activities. It is seen in figure 8 that the Arabic name is less associated with sports activities and is almost equal with the Ugandan name. As soon as Christian names are involved the selection "no activities" is chosen very less. Others have at least 10 points more.

In the survey of foreign names it is clearly seen that the respondents were biased. When a name is familiar hobbies and language are probably the same. As long as Christian names are still involved the respondents have it still easy to choose gender and language. Especially the Namibian names with Christian names gave the biggest difficulties when it comes to choose the ethnics.

In general it can be said that only names (without additional information) can confuse the respondents. When a society communicates sooner or later barriers will fall and aversions will be minimized.

### Overview of the Online Survey – Step 2 Austria

The survey of Step 2 was performed between the 26<sup>th</sup> of July and 26<sup>th</sup> of August 2017. In total 44 mails were sent to employees in one business unit. 75% (33) respondents opened the online platform to read / see the introduction. 28 respondents started and 20 finished the survey. The survey has a completion rate of 71.43%. The average time was about 5 min.

The business unit which was chosen is located in Austria and part of an international group with 27 other business units located on three continents. All business units together have more than 15,000 employees.

### Result of the Survey – Step 2 General

The first questions were about general information like gender, age, work experience and highest education. The second part was going more into details in migration background, are you understood within or outside the department. The third part of the survey covers the five questions how to find define cultural intelligence. The first three parts are also performed in the first step of the dissertation (with young professionals – outside the business units). The result of all part investigations will finally cumulated to a big dataset to get significance out of the data. In the first step 42 filled and in second step (Austria) 20 filled questionnaires were collected. In both surveys no significance, due to few respondents, in each survey were detected. The more questionnaires were collected the chance of significance increase.

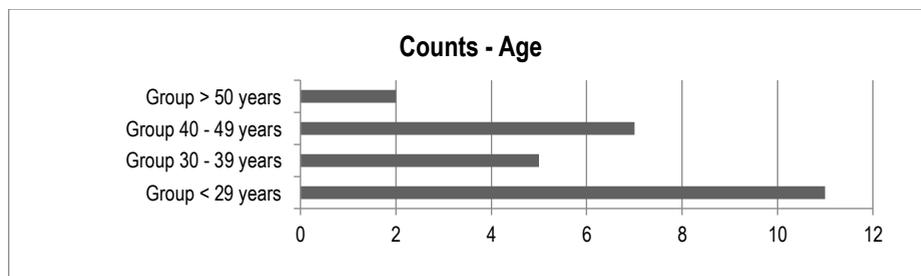


Figure 9: Counts – Age Source: Own diagram

In the survey of the second step 56% were females and 44% were male. The educational level is as follows: 32% (8) have a finished apprenticeship, 32% (8) have a high school certificate, 28% (7) have done additional schools after secondary school and 8% (2) have a university of applied science educational level.

It is seen that the biggest group of employee is in the group up to 29 years. Only 2 employees are older than 50 years. The group of the 40 – 49 aged employees is the second biggest.

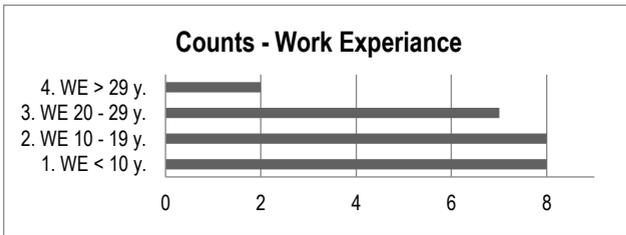


Figure 10: Counts – Work Experience, Source: Own diagram

In addition to the age 2 employees have more than 29 years of work experience. Group 1 (8 counts) has less than ten years of work experience. The majorities of the respondents are in group 2 and 3 and have between 10 and 29 years of work experience.

Out of 25 respondents only 2 (8%) employees have a direct or in first generation (parents) migration background.

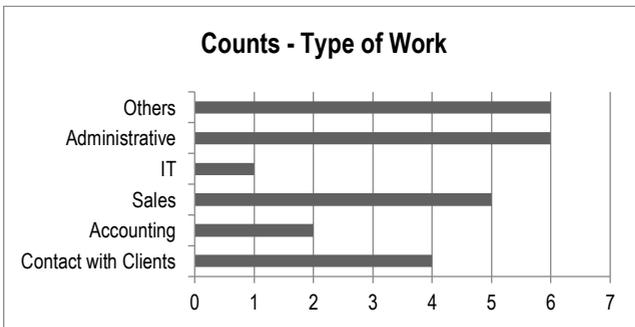


Figure 11: Counts – Type of Work, Source: Own diagram

It is seen that the biggest part of the organization works in the back office to facilitate the operational continuity of the company therefore the majority of the respondents don't have contact with clients. Only four in the head office and five of the sales respondents communicate directly with clients.

To work with customers need employees who are more extroverted rather than employees who work in the accounting department. IT specialists are more introverted and focused on things – like computers.

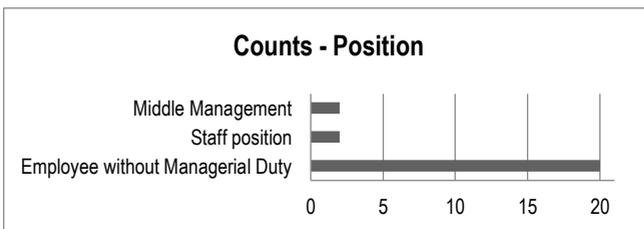


Figure 12: Counts – Position Source: Own diagram

Most of the employees (83.33%) are in position where they don't have to manage other colleagues or even a budget. Only four respondents are counted with responsibilities for other employees and budgets. Managers and positions below the CEO (e. g. staff position) in general should have a higher cultural knowledge rather than “normal employees” to lead their staff into the right direction.

The next questions cover the cultural differences within a department and between other departments. When people work together, maybe in the same office, than at least they should understand (not only by language) and bypass possible cultural differences. Cultural differences within a department can lead into a reduction of productivity and an increase of mistakes. Normally more employee work on one business process and mistakes can occur. A good coordinated team will find the mistake and eliminate them. If people don't work together mistakes can lead into financial loss and company's reputation. The result of the survey was as follows:

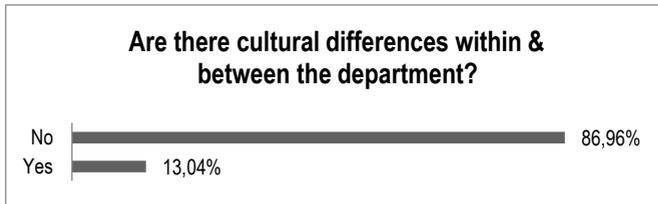


Figure 13: Ratio – Cultural differences between and within departments Source: Own diagram

Both questions were answered the same. 86.96% feel that there are no cultural differences within the department and even between other departments. In total 20 respondents selected no differences. Only 3 respondents selected “yes” there are differences within and between the departments. In general it is a good sign when employees feel / think that there are no differences.

The control questions show a slightly different picture of the previous questions. It shows a stronger team spirit within the department but between other departments the team spirit drifted apart.

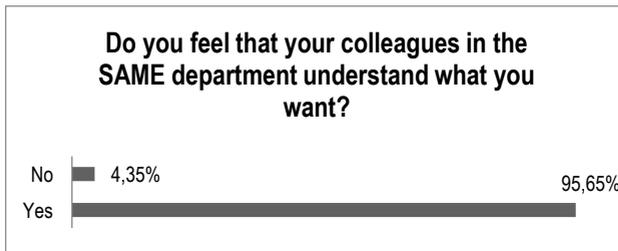


Figure 14: Ratio – Cultural differences within the department Source: Own diagram

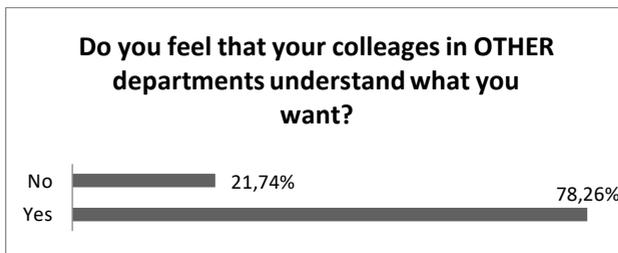


Figure 15: Ratio – Cultural differences between departments Source: Own diagram

The result from figure 13 (do my colleagues understand me – SAME department) is more clear and confirms the previous question about the cultural differences within the department. There was only 1 respondent who selected “NO”. A good team spirit exists in the departments. Disparate answers were selected with the question about the communication between OTHER departments. The result from figure 14 doesn't show the result from the previous question, where only 4 respondents answered that there are cultural differences. More respondents (21. 74%) are the opinion that their cases / needs / urgencies are not understood in other departments.

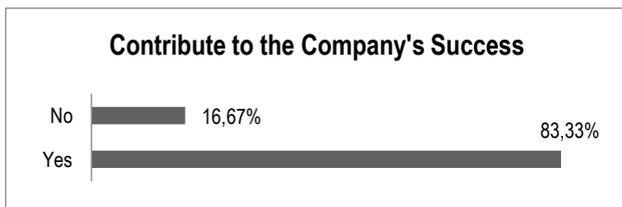


Figure 16: Ratio – Contribute to the Companies Success Source: Own diagram

Most of the employees have the feeling that they contribute to the company's success. Out of 24 respondents 20 indicated yes that they contribute to the success. Only 4 respondents feel that they are doing some work without any value to the company. This result can be an indicator that the respondents are attached with the company. It is the responsibility of the managing director to assure every employee the importance of his person and work to further increase the productivity.

**Result of the Survey – Step 2 Cultural Intelligence**

The following results describe how the employees want to work. It is expected that every department has its own median which will not correspond with other departments. For example the accounting department will not take a high risk at the work due to higher financial impact compared with the marketing department which needs to take higher risk in advertising to be recognized in the field. If it is so the following tables will explain. Brief description of the Main\_Work: 1 = Contact with Clients (e. g. Call Center), 2 = Accounting dept., 3 = Sales dept., 6 = IT = dept., 7 = Administrative dept., 8 = Others (3x Marketing, 1x Logistics, 1x Disposition). Brief description of the groups: 1 = 0 – 24; 2 = 25 – 49, 3 = 50 – 74, 4 = 75 – 100.

In general the majority (63.16%) prefer to work in a team. The tendency in the result is that more than 42.11% want to work only in a team. The other extreme is that 26.32% want to work only along. Even one respondent from the sales department want to work alone before mingle with other people. The group 1 is more outspoken than the administrative department. All employees in group 1 want to work more in a team.

The group 8 is very interesting due to ambivalent perception. All marketing employees want to work more alone rather than in a team. Both logistics and disposition prefer to work in a team (>75.00%). The marketing department should be normally more extrinsic motivated to work together with other departments. Especially with the sales representatives a good communication is indispensable. Also an ambivalent picture shows the result from group 7. The tendency is going to work more alone and not in a team. It might be forgotten that processes can only be managed together in an interdisciplinary team. Standalone processes which only be worked off in one department are very rare. The accounting department also wants to work more alone rather than in a team. It is the nature of the workers in an accounting department to be more "alone" with their numbers and not have contact with clients.

**Main Work \*. Work preferences**

Main\_Work \* Alone\_Team\_Group Crosstabulation

Count		Alone_Team_Group				Total
		1	2	3	4	
Main_Work	1	0	0	1	3	4
	2	1	0	1	0	2
	3	1	0	0	2	3
	6	0	1	0	0	1
	7	2	0	1	1	4
	8	1	1	1	2	5
Total		5	2	4	8	19

Figure 17: Main\_Work, Alone\_Team\_Group Source: Own diagram

Brief description for the group Security\_Risk\_Group: 1= 100% Security, 4 = 100% risk. The result of this question is evenly distributed. 50% will not take any risk in the job and 50% will take risks. It is seen in figure 17 that the sales representative don't want to take risks in their job rather than the group administrative where slightly more employee take risks. Also the

group others take more risks than the group contact with clients. In general no trend is seen in the result.

### Main\_Work \* Security - Risk

Main_Work * Security_Risk_Group Crosstabulation						
Count		Security_Risk_Group				Total
		1	2	3	4	
Main_Work	1	1	0	1	0	2
	2	0	0	0	1	1
	3	1	2	0	0	3
	6	0	1	0	0	1
	7	2	0	1	2	5
	8	1	0	3	0	4
Total		5	3	5	3	16

Figure 18: Main\_Work \* Security\_Risk Source: Own diagram

### Main\_Work \* Flat - Hierarchy

The next question describes how the employees prefer to work. 1 = Flat organization, 4 = very Hierarchy organization. Startups have due to few employees or one-man companies have in general flat hierarchy in the organization. The question for every founder is when to start with the development of the organization. It might be possible that employee will leave the company as soon as the organization will be developed and management levels will be established.

Brief description for the group Flat\_Hierarchy: 1= 100% Flat, 4 = 100% Hierarchy. It is seen that the group 1 (contact with clients) have evenly distributed selected. In every category one person selected. The group 2 (Accounting Department) selected one time the lowest and one time the highest sections. In this situation the head of department has to try to find a way to fulfill both wishes of the employees. The group 3 (Sales Representatives) prefer more structured organization. For them it must be clear where to go by problems – to have a clear picture of the system they work in. Group 7 (Others) like it more flat. There are employees from the marketing department who needs their room to be creative. Hierarchy organization will just limit them to be innovative.

Main_Work * Flat_Hierarchy_Group Crosstabulation						
Count		Flat_Hierarchy_Group				Total
		1	2	3	4	
Main_Work	1	1	1	1	1	4
	2	1	0	0	1	2
	3	0	0	1	1	2
	6	0	0	1	0	1
	7	1	0	2	2	5
	8	2	1	1	1	5
Total		5	2	6	6	19

Figure 18: Main\_Work \* Flat\_Hierarchy Source: Own diagram

### How to solve a Problem

In some situations employees can't go further with their work / process. These issues occur when problems rise in their area of responsibility. But the question is: "who to ask?" In "normal" departments is the first way is to ask their colleagues and the head of department. If this is not possible for any reason the next is to ask outside their closer work colleagues. This question was asked among the employees.

It is seen in figure 19 that 50% want to find a solution within the same department. 9 counts or 45% will ask directly the manager of the department. Only one count (5) will ask the IT Department to solve their problem. This respondent may faced some technical problems in the past. No respondent selected the possibility to keep the problem by him / her self. This can be interpreted that the problem will be solved with an acceptable way (time, respect ...). It is also seen that no solution will be looked for outside the department. Maybe the problems are specific problems which can't be solved from outside.

Solution	Counts
Ask my Manager	9
Ask the IT-Department	1
Keep the problem by myself	0
I speak in the break about the problem	0
Suche eine Lösung innerhalb der Abteilung	10
Suche eine Lösung außerhalb der Abteilung	0
Total	20

Figure 20: How to solve a Problem Source: Own diagram

#### Main\_Work \* Direct – Indirect Communication

Communication is one of the core cultural competences which individuals own. In this world 6,500 – 7,000 languages exist (Pereltsvaig, 2012). Most of them have in addition also their subdialects. Communication is the basic to exchange / interact with people. But how to communicate in the right way across different cultures can be difficult. Mistakes in communication are common and can irritate the listener. The next question explored the communication within a company. Do employees prefer the direct or the indirect communication? Direct means that the employees talk face to face with the supervisor or write a mail direct to the manager not using others (colleagues) to address issues.

It is seen in figure 20 that more than 85% of the employees prefer the direct communication. Even 50% prefer the highest quarter of direct communication. Only 25% prefer a slightly indirect communication. The other 50% prefer a mixture between direct and indirect communication. Maybe it is important for these employees to choose the right communication channel for each and individual issue differently, depending on the actual needs. Only the group 8 (others) choose more indirect communication. They mainly work in-house and don't have direct contact with customers. Even the marketing department prefers to communicate more indirectly. The sales representatives prefer direct communication which is perhaps needed when they talk face to face with the customer. In group 1 (contact with clients) some employee prefer to communicate.

#### Main\_Work \* Indirect\_Direct\_Group Crosstabulation

Count		Indirect_Direct_Group			Total
		2	3	4	
Main_Work	1	0	3	1	4
	2	0	0	2	2
	3	0	0	3	3
	6	0	1	0	1
	7	0	1	4	5
	8	3	2	0	5
	Total	3	7	10	20

Figure 21: Main\_Work \* Indirect\_Direct\_Communication Source: Own diagram

slightly more indirectly rather than directly. It is interesting to see that the group 2 (accounting department) prefer to communicate direct. It is said that accountants are more introverted and focused only on the task.

#### Main\_Work \* Task\_Relation

Task oriented employee only see the work which should be done within a certain time. It plays only a subordinate role if they are liked in what they do or not. The task is in focus. Relation oriented employee think before they hand over work to their colleagues. To have a good relationship between the employees is important and is the basic condition to be happy at work.

It is seen in figure 21 that the selected quarters are equally distributed. 50% prefer more tasks and vice versa. But the highest scores are mentioned in the center (in total 75%). The IT-department (group 6) prefer purely to work on tasks. The group 1 prefers to work more relation oriented but not 100%. Only one employee selected the highest quarter (almost 100% relation oriented). The group 3 (sales department) like to work more task oriented and not relationship oriented. In general it can be said that the result is quite ambivalent. No clear picture / tendency are seen in this company.

Main\_Work \* Task\_Relation\_Group Crosstabulation

Count		Task_Relation_Group				Total
		1	2	3	4	
Main_Work	1	0	1	2	0	3
	2	1	0	1	0	2
	3	0	2	0	0	2
	6	1	0	0	0	1
	7	1	0	2	0	3
	8	0	2	2	1	5
Total		3	5	7	1	16

Figure 22: Main\_Work \* Task\_Relation\_Source: Own diagram

## Conclusion of the Online Survey – Step 2 Austria

### *The first Part – foreign names*

Names play a huge role in the way to success in many ways. Does someone want to rent a house, apply for a job, ask for some help. Names trigger if a person will get something or not. Officially it is not allowed to write in an ad that a company only looks for locals. But in the background applicants with foreign names fall out of the race only because of this reason.

Either way, the right pronunciation of the name is crucial. Not respecting cultural differences can lead to clashes. Just treat all people as individuals, the thinking goes, and soon, peace will guide the planet and love will steer the stars (Markus, 2014). Inhabitants of a region fear in general change for example when foreigners migrate to their area. It's a kind of cultural change which everyone has enough of them. We all have many different cultures crisscrossing through our lives, from major cultures like nations, genders, and social classes; to subcultures like professions, hobbies, and even sport-team fandom (Markus, 2014). Given names are part of the closest cultural characteristics. It is hard for inhabitants to put names into the right category as long as no other information / picture is available to them. We all think in boxes, how we raced up, and put people / names / issues into a particular category. To avoid this trend is to break somehow the cycle. Being aware of the culture cycle is the first step to controlling it. Once you know that the environment is full of primes that shape your behavior, you can begin to consciously override these cues, or even replace them with more desirable one (Markus, 2014).

It is the responsibility of a managing director, for example, to hire the best applicant for a specific job, independently from the given name of the person. Names should not trigger any decision from the side of the receiver. To know that we are biased in many ways can help to gather more impressions from a person so that the opinion regarding a specific person can change.

### *The second Part – survey within a company*

The survey shows the actual result of the company's culture. The survey within the company did not show any significance due to fewer respondents. Only descriptive statistic was used to analyze the results. In the following surveys more filled questionnaires will be collected. Other subsidiaries will be contacted and responsible managers at headquarter interviewed.

The five questions regarding the cultural preferences showed an ambivalent picture. Only the communication shows a higher trend to direct communication rather than indirect communication in general. The employees in general prefer to work more on task level and not so much on relationship basis. The result of "How to solve a Problem" shows clearly that the employee prefer to solve problems within the department and don't involve additional departments or colleagues from the other side of the company. Also the direct manager plays a big role to solve problems. The results of the question "Security vs. Risk" shows that the respondents prefer not to take risk in their job. In companies where innovation drives the business risk is omnipresent. Of course, it is the duty of the managers to mitigate the risk as much as possible. In this examined company the employee prefer to be on the saver site.

The result of the question "Flat vs. Hierarchy" structure goes towards more hierarchy structure within the company. People want to be guided. Flat organizations often do not have clear ways of reporting and responsibilities. This character also changes due to the type of the company. Startups have more flat organizations. As soon as the company grows (with staff) levels must be implemented. People who like flat structures may leave the company because of this.

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## References

- [1] Arlt H., Donald Daviau G. (2009). *Culture, Civilization and Human Society – Volume I. Encyclopedia of Life Support Systems (EOLSS)*. pp. 55.
- [2] Bleicher, K. (1992): *Unternehmenskultur und strategische Unternehmensführung*. In: Hahn, D. /Taylor, B. (Hrsg.), a. a. O., pp. 852.
- [3] Englishlive (2017). *Most liked sports types of the British*, retrieved from <https://englishlive.ef.com/de-de/blog/funf-beliebte-sportarten-der-briten/>.
- [4] Evivam (2017). *Most liked sports types worldwide*, retrieved from <http://www.evivam.de/life/alltag/news/beliebtesten-sportarten-261633.html>.
- [5] Flader D, Comati S. (2008). *Kulturschock: Interkulturelle Handlungskonflikte westlicher Unternehmen in Mittelost- und Südosteuropa*. Springer VS. Pp. 41 – 42.
- [6] Hayes, C.J. (2013). *The Terrible Meanings of Names: Or Why You Shouldn't Poke Your Giselle with a Barry*. F+W Media, Inc. pp43.
- [7] Homma, N., Bauschke R., Hofmann L. M. (2014). *Einführung Unternehmenskultur: Grundlagen, Perspektiven, Konsequenzen*, Wiesbaden, Gabler Verlag. 50.
- [8] Krystek, U. (1992). *Unternehmenskultur und Akquisition*, in: *Zeitschrift für Betriebswirtschaft*. 5/1992. 539-565.
- [9] Le Rouzic, P. (2002). *The Secret Meaning of Names*. The Sunstar Publishing Group, Ltd. Library of Congress Catalog. 3.
- [10] Markus Rose H., Conner A. (2014). *Clash, How to thrive in a multicultural world*, Penguin group (USA) LLC. 16, 23.
- [11] Niesen, A. (2007). *Personalwirtschaftlicher Wandel in Japan, Arbeiten in internationalen Projektteams: Typische Probleme und Wege zu ihrer Lösung*. Gabler Verlag, Wiesbaden. 41.
- [12] Pereltsvaig A. (2012). *Languages of the World: An Introduction*. Cambridge University Press. 11.
- [13] Peterson, B. (2004). *Cultural intelligence, A guide to working with people from other cultures*. Quercus. 173.
- [14] Rothlauf, J. (1999). *Interkulturelles Management*. WiSo Lehr- und Handbücher. Oldenbourg. 269, 285, 288-289.
- [15] Stanford N. (2010). *Corporate Culture: Getting It Right*. The Economist. John Wiley & Sons. 178
- [16] Ulrich, P. (1993). *Integrative Wirtschafts- und Unternehmensethik: ein Rahmenkonzept*, Institut für Wirtschaftsethik der Universität St. Gallen. 4352.
- [17] Vertovec, S. (2015). <http://www.sueddeutsche.de/politik/fluechtlinge-was-die-zuwanderung-mit-deutschland-macht-1.2710550>
- [18] Wirtz, P. (2003). *Mergers & Acquisitions Management, Strategie und Organisation von Unternehmenszusammenschlüssen*. Betriebswirtschaftlicher Verlag. Dr.Th. Gabler, Wiesbaden. p310.

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## Spatial Variability of Soil Aggregate Stability in a Disturbed River Watershed

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### Abstract

Analysis of spatial distribution of soil properties like soil aggregate stability presents an important outset for precision agriculture. The study area was classified into different landscape units according to physiographic features namely: mountains, plateaus, uplands, valleys, pen plains, alluvial plains, lacustrine plains and hills and maps were drawn. The objectives of this study were to evaluate the effects of landscape and land use interaction on the spatial variability of aggregate stability. The variability of aggregate stability exhibited spatial dependence (SDP) which helped in the generation of a spatial dependence index (SDI) that was described using semivariogram models.  $SPD_{\text{Gaussian}}(\%) \leq 25\%$  gave a weak spatial dependence, moderate spatial dependence was given by  $25\% < SDP(\%) \leq 75\%$  and strong spatial dependence by  $SDP(\%) > 75\%$ , while  $SDI_{\text{Gaussian}}(\%) \leq 25\%$  gave a strong spatial dependence index while moderate spatial dependence index was indicated by  $25\% < SDI(\%) \leq 75\%$ , and weak spatial dependence index  $SDI(\%) > 75\%$ . Mean Weight Diameters (MWD) of 0.25 – 0.45 represented unstable soils mostly found in wetlands occurring in valleys, mountains, plains, and depressions in hills, 0.55 – 0.62 represented moderately stable soils mostly in agricultural and grassland areas which include plateaus, uplands, and plains, while 0.62 – 0.92 represented stable and very stable soils being found in forested areas, mountains and hills. Various interpolation (kriging) techniques capitalized on the spatial correlation between observations to predict attribute values at unsampled locations using information related to one or several attributes that helped in the construction of an aggregate stability prediction map using Empirical Bayesian kriging (EBK) technique.

**Keywords:** land scape, Spatial Variability, semivariogram, Geostatitics, aggregate stability, kriging

### 1. Introduction

Spatial distribution of soil properties, techniques such as classical statistics and Geostatitics have been widely applied (Webster and .Oliver, 1990, Wang et al 2009). Geostatitics provides the basis for the interpolation and interpretation of the spatial variability of soil properties (Webster, 1985, Pohlmann, 1993, Cambardella et al, 1994). Information on the spatial variability of soil properties leads to better management decisions aimed at correcting problems and at least maintaining productivity and sustainability of the soils and thus increasing the precision of farming practices (Schimel et al, 2000, Ozg"oz, 2009)).A better understanding of the spatial variability of soil properties would enable refining agricultural management practices by identifying sites where remediation and management are needed. This promotes sustainable soil and land use and also provides a valuable base against which subsequent future studies can be proposed (Cambardella et al, 1994)

Aggregate stability has been studied extensively since the early 19<sup>th</sup> century (Yoder, 1936). This sustained interest shows that aggregate stability plays a central role in the behavior of soils and that its role is still not clearly understood. However opportunities arising from spatial dependence of soil properties can be exploited to explain the role of aggregate stability in the behavior of soils. So far a few studies have shown that spatial dependence of soil properties influence weed distribution (Gaston et al., 2001), crop yield (Cassel et al., 2000) and can explain the spatially variable safe sites concept (Zanin et al., 1998).

Several authors have studied the spatial distribution of soil properties like particle size, organic matter, pH and soil microbial activity at different scales ranging from a few meters (Gajem *et al.*, 1981) to several kilometers (Ovalles and Collins, 1988). Among the various soil properties hydraulic conductivity ( $K_s$ ) is reported to have the highest statistical variability (Bigger and Nielsen, 1976). It is evident now that spatial variability of soil properties are scale dependent especially those related to water transport in the soils (Iqbal *et al.*, 2005).

Indeed within the last two decades spatial variability has been studied using technologies such as remote sensing (Viscarra-Rossell and McBratney, 1997) and geographical information systems (Mulla and Schepers, 1997). These technologies have been developed to help land users better manage land resources utilizing spatially varying prescription intensities (Stafford, 1997; Cassel *et al.*, 2000). Soil management practices associated with various land uses may modify the soil behavior for example through additions or withdrawal of organic matter and compaction thereby profoundly altering spatial variability of aggregate stability. Stutter *et al.*, (2004) studied the spatial variability and variance structure of cation exchange chemistry in a granitic, hither moorland site in Northwest Scotland. Their results showed strongly significant short-range vertical and lateral variability. Soil properties vary spatially from a field to a larger regional scale affected by both intrinsic (soil forming factors) and extrinsic factors (soil management practices, fertilization, and crop rotation) (Cambardella and Karlen, 1999). The variation is a gradual change in soil properties as a function of landforms, geomorphic elements, soil forming factors and soil management (Buol *et al.*, 1997). The variation of soil properties should be monitored and quantified to understand the effects of land use and management systems on soils. Geostatistical methods like kriging have been used successfully for predicting spatial variability of soil properties (Trangmar *et al.* 1985; Gaston *et al.*, 2001; Cambardella *et al.*, 1994; Saldana *et al.*, 1998; Zebarth *et al.*, 2002; Lark, 2002; Dercon *et al.*, 2003).

Kriging uses a semivariogram which is a function of the distance and direction separating two locations—to quantify the spatial dependence in the data. A semivariogram is constructed by calculating half the average squared difference of the values of all the pairs of measurements at locations separated by a given distance  $h$ . The semivariogram is plotted on the  $y$  axis against the separation distance  $h$ . This semivariogram model is then used to define the weights that determine the contribution of each observed data point to the prediction of new values at unsampled locations. There are some statistical assumptions behind kriging. The main assumption is stationarity (spatial homogeneity). If data is stationary, the data mean and the semivariogram are the same at all locations in the data extent. If this assumption is held, just a few kriging model parameters have to be estimated from the data. Indeed it can be concluded from the literature that most soil properties have short-range spatial structure extending only tens of meters and that long-range spatial structure is doubtful (Campbell, 1978; Trangmar *et al.*, 1986; Gaston *et al.*, 2001; Iqbal *et al.*, 2005).

The study sought to establish that land use and Landscape interactions had influence on the spatial variability of aggregate stability within the watershed.

## 2.0 Materials and Methods

### 2.1 Location and environmental conditions of the study area

The Middle river Njoro catchment is located in Nakuru County within the Kenyan part of the East African Rift System. It lies between longitudes  $35^{\circ} 05'E$  and  $36^{\circ} 05'E$ , and latitudes  $0^{\circ} 15'S$  and  $0^{\circ} 25'S$ . The catchment covers about 8,200 ha and is located about 200km North West of Nairobi in Nakuru County. The catchments lie between altitudes 1720m above sea level (asl) and 3000m asl (Figure 1). The sub watershed has slopes in the range of less than 2% to more than 30 %.( Figure 2). The river has its source from Mau escarpment and drains into Lake Nakuru (Mainuri and Owino, 2014).

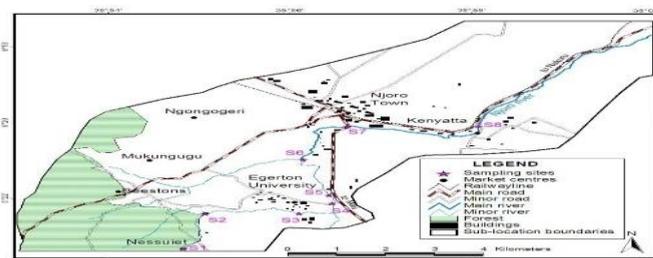


Figure 1: Study Area (Source: Mainuri and Owino, 2014)

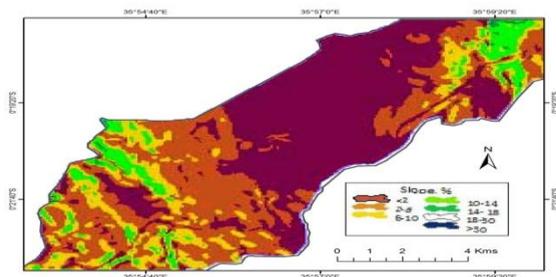


Figure 2: Slope Map

## 2.2 Methods

### 2.2.1: Soil Mapping

The study area was classified into six (6) different landscape units according to physiographic features namely: mountains, plateaus, uplands, valleys, peneplains, alluvial plains, lacustrine plains and hills (Figure 3).

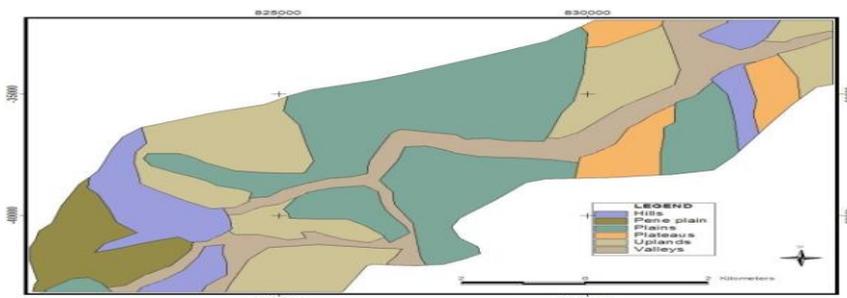


Figure 3: Physiographic Map of the Middle River Njoro Watershed

The selection of profile pits for sampling was based on the physiographic units and positions for the pits selected at random. Soil classification was done according to FAO/UNESCO (1997).

### 2.2.2 Determination of Aggregate Stability

Soil aggregate analysis was done following the wet sieving technique of Yoder 1936 with the help of a nest of six sieves (5, 2, 1, 0.5, 0.25, and 0.1 mm). Soil aggregates (>5.0–8.0 mm) were spread on the top sieve and soaked with salt-free water twice at the interval of 5 min. The nest of sieves were then submerged under water and oscillated at 35 cycles/minutes. The aggregates on each sieve was collected, oven-dried, and weighed. The aggregates were treated with  $H_2O_2$  and HCl and passed through the same sieve and the weights of non aggregated primary particles were taken after oven drying. Soil aggregate stability was expressed in terms of mean weight diameter (MWD) in millimeters, defined as the sum of the product of the mean diameter,  $X_i$ , and the total sample weight,  $W_i$ , of each size fraction ( $MWD = \sum X_i W_i$ ).

### 2.2.3 Mapping Aggregate Stability

Analysis of spatial variability of soil aggregate stability within the Middle River Njoro watershed was done using two geostatistical methods: (i) investigating spatial autocorrelation in the datasets using a semivariogram/covariance cloud (Cressie, 1985; Cressie, 1988), and (ii) prediction of attribute values at unsampled locations using a generalized linear regression technique called Empirical Bayesian kriging. The structure of spatial variance between aggregate stability observations was derived from the sample semivariogram

### 2.2.4 The Semivariogram

A spatial layer of the soil sampling sites with the respective soil aggregate stability was composed using ArcGIS software. The spatial sampling site layer was input as the source of data and the soil aggregate stability as the data field. To explore and quantify the spatial autocorrelation of the soil sampling sites, geostatistical wizard functionality within ArcGIS was used (Isaaks *et. al.* 1989; Journel and Huijbregts, 1978; Stein, 1999). Empirical Bayesian Kriging linear regression technique was used to generate a soil aggregate stability prediction map

## 3.0 Results and Discussions

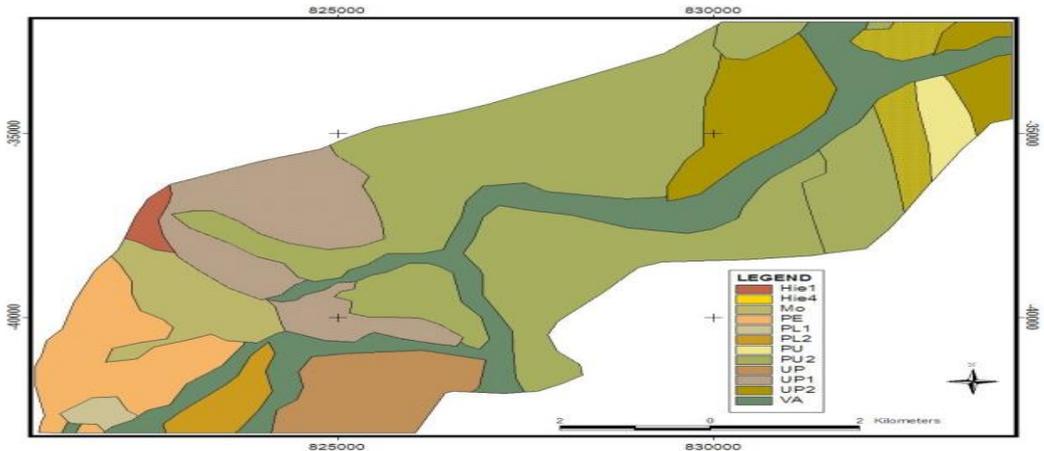
### 3.1: Soil Mapping

The soils in the catchments were distinguished on the basis of Physiographic, parent material/ geology and soil characteristics. Six major physiographic units, mountains, hills, plateaus, uplands, plains and valleys (Figure 3) were identified in the area. Mountains (Mo) and major scarps have slopes greater than 30% (Forests).The soils of this geomorphic unit are developed on volcanic ashes and other pyroclastic rocks of recent volcanoes with stable to very stable structures. Hills (Hie) and minor scarps (Forests) have slopes which are greater than 16% with stable structures. The soils of this geomorphic unit are developed on ashes and other pyroclastic rocks of recent volcanoes. The plateaus (PU) (Agriculture and grasslands) are undulating with slopes of between 5 – 8%. The soils are developed on ashes and other pyroclastic rocks of recent volcanoes with moderately stable structure. The uplands (UP) (agriculture, grasslands and minor forests) are undulating with slopes of between 5 – 8%. The soils which are moderately stable are developed on volcanic ashes and other pyroclastic rocks of recent volcanoes.

**Figure 3: Soil Mapping Units**

The plains (PL) (grasslands and agriculture) are flat to very gently undulating in relief with moderately stable structures and slopes of between 0 – 2%. The soils of this unit are well drained, deep to very deep. Soils of Valleys (VA) (grasslands, agriculture and wetlands) are well drained to imperfectly drained, moderately deep to deep and unstable. As observed from the results, the landscapes where most agricultural activities take place are dominated by soils that have structures that range from moderately stable to unstable making them quite susceptible to soil erosion.

### 3.2 Mapping Aggregate Stability Using Empirical Bayesian Kriging (EBK)



The selection of sampling sites was based on the physiographic units and sampling points for aggregate stability determination selected at random Figure 4.

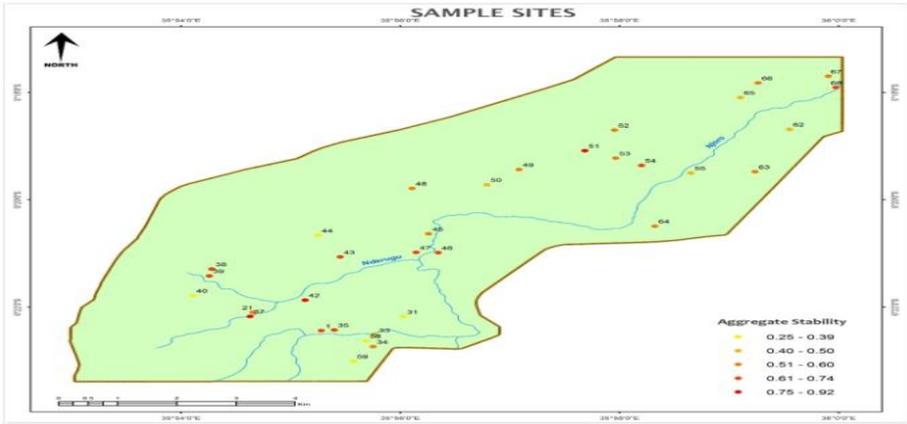


Figure 4: Sampling Sites for Aggregate Stability showing Aggregate stability values

The Empirical Bayesian Kriging (EBK) was used to build a valid kriging model due to its ability to interpolate and automate the most difficult aspects of building a valid model (Figure 5). Other kriging methods in Geostatistical Analysis require somebody to manually adjust parameters to receive accurate results, but EBK automatically calculates these parameters through a process of sub setting and simulations. Empirical Bayesian kriging also differs from other kriging methods because it accounts for the error introduced by estimating the underlying semivariogram. By not taking the uncertainty of semivariogram estimation into account, other kriging methods underestimate the standard errors of prediction. EBK differs from other kriging methods in Geostatistical Analyst by using an intrinsic random function as the kriging model. The variability of aggregate stability exhibited spatial dependence that was described using semivariogram models. The degree of spatial dependence for each variable was determined with geostatistical methods using semivariogram analysis and kriging.

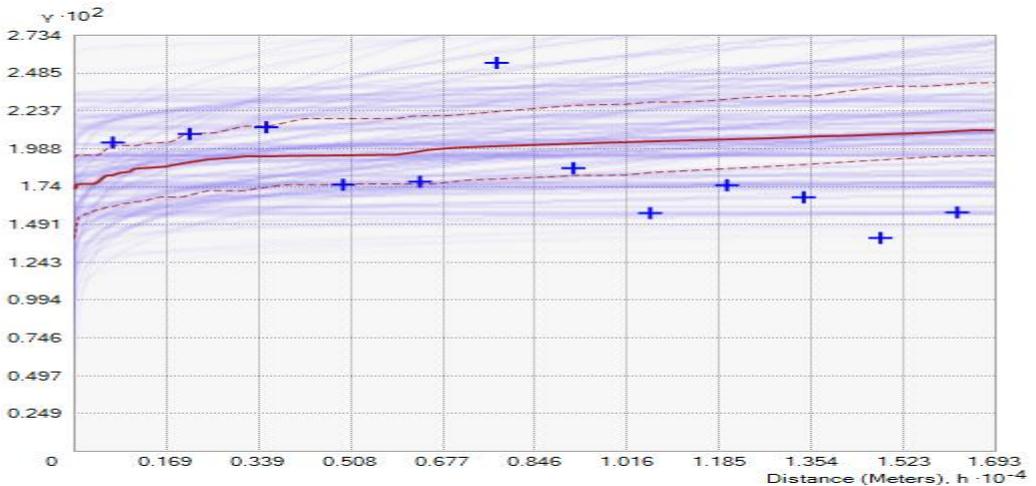


Figure 5: The spectrum of the semivariogram models produced by EBK.

The semivariogram for aggregate stability analysis consisted of three basic parameters which described the spatial structures  $\gamma(h) = C_0 + C$ .  $C_0$  represented the *nugget effect*, which was the local variation occurring at scales finer than the sampling interval, such as sampling error, fine-scale spatial variability, and measurement error;  $C_0 + C$  is the *sill* (total variance); and the distance at which semivariogram levels off at the sill which was called the *range* (beyond that distance the sampling variables were not correlated). The variability of aggregate stability exhibited spatial dependence that was

described using acceptable or licit semivariogram models which included Spherical, Exponential, Gaussian and Power models. Each semivariogram had advantages and disadvantages. When choosing a semivariogram therefore, the calculation time and the flexibility of the model (the ability to accurately accommodate a broad range of datasets) was taken into account. The spherical model (Figure 6A) is very fast but the least flexible and actually reaches the specified sill value,  $c$ , at the specified range,  $a$ . The exponential model (Figure 6B) offers a flexible transformation which is faster but the shape of the semivariogram is not flexible. It is slow compared to Power and spherical models. The Gaussian model (Figure 6C) approaches the sill asymptotically, with  $a$  representing the practical range which is the distance at which the semi variance reaches 95% of the sill value. The Gaussian model, with its parabolic behavior at the origin, represented the very smoothly varying properties of aggregate stability (However, using the Gaussian model alone without a nugget effect can lead to numerical instabilities in the kriging process.) The spherical and exponential models exhibited linear behavior at origin, which was appropriate for representing these properties which had a higher level of short-range variability. Models with a finite sill, like the Gaussian, exponential, and spherical, are referred to as *transition* models and have corresponding covariance functions. The power model (Figure 6D), however, does not reach a finite sill and does not have a corresponding covariance function.

The Gaussian model (Figure 6C) was selected for fitting the data onto the semivariogram as it had a Standard Mean which was most nearest to zero, the smallest root-mean-squared prediction error, the smallest difference between the Average Standard Error (ASE) and Root Mean Squared (RMS), and a Standardized Root Mean Squared (SRMS) prediction nearest to one as recommended by ESRI, 2007. The calculations leading to the choice of Gaussian Model is shown in Table 1.

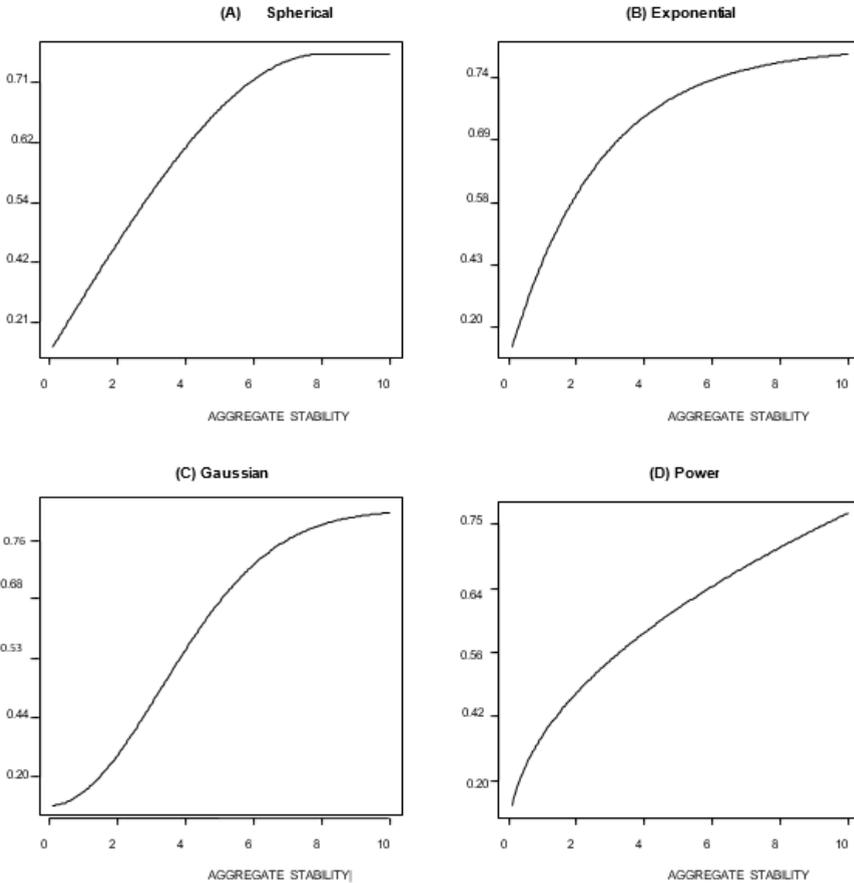
**Table 1 Parametric Comparison of the various Semivariogram model**

	Mean	Root-Mean-Squared [RMS]	Average Standard Error [ASE]	ASE-RMS	Mean Standardized	Root-Mean-Square Standardized
Circular	-0.6075	13.52	13.71	0.19	-0.03936	0.9925
Spherical	-0.4487	13.57	13.69	0.12	-0.02833	0.9976
Tetraspherical	-0.4333	13.62	13.74	0.12	-0.02732	0.9969
Pentasperical	-0.434	13.89	13.62	-0.27	-0.02677	1.026
Gaussian	-0.4375	13.35	13.71	0.36	-0.02763	0.9812
Exponential	-0.434	13.89	13.62	-0.27	-0.02677	1.026
Rational Quadratic	-0.4303	13.87	13.81	-0.06	-0.02683	1.008
Hole Effect	-0.4674	13.45	14.05	0.6	-0.03032	0.9615
K-bessel	-0.1188	13.75	13.93	0.18	-0.004366	0.9917
J-Bessel	-0.152	13.42	14.18	0.76	-0.008349	0.9514

*The spatial dependence in this Gaussian process can also be used in showing the patterns of ridges and valleys.* The notion of spatial heterogeneity in current spatial statistics is only used to characterize local variance of spatial dependence or regression. The heterogeneity is power law like rather than Gaussian distribution like. With this broad perspective, both spatial dependence and heterogeneity depicted the true picture of the Earth's surface. There are far more small things than large ones across all scales or globally, but things are more or less similar at one scale or locally. Empirical Bayesian kriging (EBK) offered the multiplicative skewing normal score transformation.

The new data was transformed and a new semivariogram model was simultaneously estimated from the simulated data. Predictions and prediction standard errors were made using weights and then back transformed with bias correction. When the data distribution is Gaussian, the best predictor is one that uses a linear combination of the nearby data values. For

other distributions, however, the best predictor is often nonlinear and, therefore, more complex. The data can be transformed to follow a Gaussian distribution. Then it is possible to accurately back transform kriging predictions to the original data scale, which can be done in ArcGIS Geostatistical Analyst. Classical kriging also assumes that the estimated semivariogram is the true semivariogram of the observed data. This means the data was generated from Gaussian distribution with the correlation structure defined by the estimated semivariogram (Figure 6C). This is a very strong assumption, and it rarely holds true in practice. Hence, action should be taken to make the statistical model more realistic.



**Figure 6: Several Semivariogram models being compared to the Gaussian model.**

Spatial modeling to generate empirical semivariogram was computed using the formula below:

$$\gamma(h) = \frac{1}{2N(h)} \left\{ \sum_{i=1}^{N(h)} [Z(x_i + h) - Z(x_i)]^2 \right\}$$

Where  $Z(x_i + h)$  and  $Z(x_i)$  are observation positions at positions  $x_i + h$  and  $x_i$ , respectively,  $h$  is the distance between observations and  $N(h)$  denotes the number of pairs of observations separated by the same lag distance  $h$ . Semivariogram (maximum distance  $h = 0.5 MD * \text{average} [(value\ at\ location\ i - value\ at\ location\ j)]^2$ )

The semivariogram for aggregate stability analysis describes the spatial structures:

$$\gamma(h) = C_0 + C.$$

$C_0$  = nugget effect (NE (%))

$C_0 + C$  = the sill (total variance);

$a$  = practical range

NE (%) =  $\left(\frac{C_0}{C_0+C_1}\right) \times 100$  In which  $C_0$  is the nugget effect and  $C_1$  is the contribution, both semivariogram parameters. According to Cambardella et al. (1994), NE has the following classification: strong spatial dependence (NE (%)  $\leq$  25 %), moderate spatial dependence (25 % < NE (%)  $\leq$  75 %), and weak spatial dependence (NE (%) > 75 %).

The second traditional index of spatial dependence (SPD), presented in Biondi et al. (1994), is given by the expression:

SPD (%) =  $\left(\frac{C_0}{C_0+C_1}\right) \times 100$ , in which  $C_0$  is the nugget effect and  $C_1$  is the contribution, both semivariogram parameters like the NE index. Adjusting the classification given by Cambardella et al. (1994), we have the following induced SPD classification: weak spatial dependence (SPD (%)  $\leq$  25 %), moderate spatial dependence (25 % < SPD (%)  $\leq$  75 %), and strong spatial dependence (SPD (%) > 75 %). We can observe that NE (%) = 100 % - SPD (%), that is, NE and SPD essentially provide the same information. Therefore, because of equivalence between the two indexes, in this article we will not regard the NE index as essentially different from the SPD index.

The spatial dependence index (SDI) is given by the following expression for Gaussian model.

SDI (Gaussian%) =  $0.504 \times \left(\frac{C_0}{C_0+C_1}\right) \times \left(\frac{a}{0.5MD}\right) \times 100$  in which  $C_0$  is the nugget effect,  $C_1$  is the contribution, and  $a$  is the practical range, both semivariogram parameters like the NE and  $0.5MD$  is half of the maximum distance (MD) between sampled points, given that in the cases in which the ratio  $a/0.5MD$  results in a value superior to 1, this ratio is then truncated into 1, in order to assume values only between zero and 1. In addition, the  $0.5MD$  factor is inspired on practical recommendations for using pairs of points up to half of the largest sampling distance in order to estimate semi variances (Journel and Huijbregts, 2003; Olea, 2006). The constant 0.504 or 50.4% (for Gaussian semivariogram) is the value of the model factor (MF) of the model that expresses the strength of the spatial dependence that the model can reach.

A run of the data using EBK model derived the empirical semivariogram/covariance spatial dependence (SDP) model:

$$SDP = 75.153 * \text{Gaussian} (8711.3, 4525.7, 51.8) + 158.48 * \text{Nugget},$$

Where: Nugget = microstructure = Measurement error

Microstructure = 172.6 (100%) and

Measurement error = 0 (0%)

Given that the SPD for the Gaussian exhibit positive asymmetric distribution, it must be categorized having the median and the 3rd quartile as limits (Table 2), in order to have a classification that is more coherent and in fitting with the distribution form. Thus, based on the results above, we propose the following classification for the SPD and SDI Where SDI = 100 – SDP or SDP = 100 – SDI giving SDI=25% and SDP= 75%

SPD<sub>Gaussian</sub>(%)  $\leq$  25% will therefore, give weak spatial dependence, moderate spatial dependence 25% < SDP (%)  $\leq$  75% and strong spatial dependence SDP (%) > 75%, while SDI<sub>Gaussian</sub> (%)  $\leq$  25% gives a strong spatial dependence index, moderate spatial dependence index 25% < SDI (%)  $\leq$  75%, and weak spatial dependence index SDI (%) > 75%. The Gaussian semivariogram model has high spatial dependence, with a high MF which led to a wider scope of values. The semivariogram model was used to derive a soil aggregate stability prediction graph illustrated by Figure 7 and a semivariogram model Figure 8.

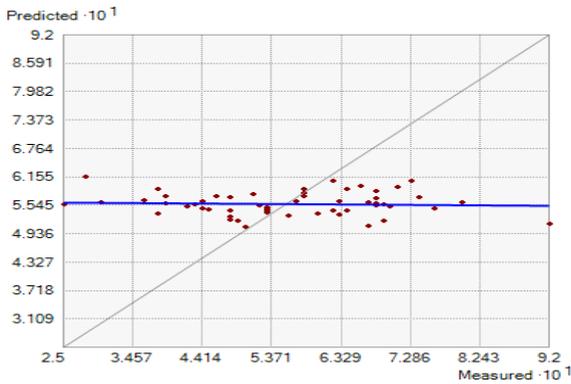


Figure 7: Soil aggregate stability prediction graph

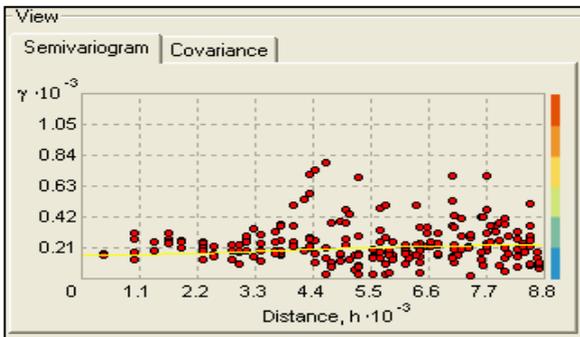


Figure 8: The semivariogram values for the pairs of points (red) and the estimated semivariogram model (yellow line)

The semivariogram models were then used to undertake Empirical kriging to create a prediction map of aggregate stability. A prediction map of the spatial dependence derived from the EBK modeling process is shown in Figure 9 below.

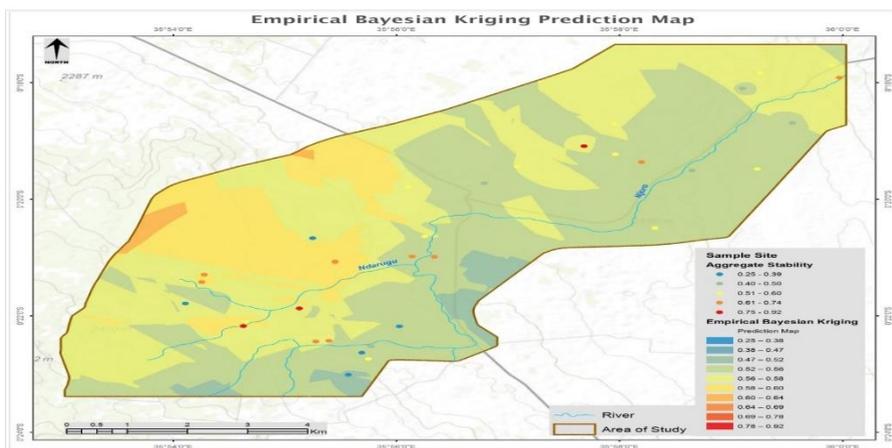


Figure 9: Empirical Bayesian Kriging prediction map with sample values.

In the figure above, the mean weight diameters (MWD) of 0.25 – 0.45 represents unstable soils mostly found in wetlands occurring in valleys, mountains, plains, and depressions in hills, 0.55 –0.62 represents moderately stable soils mostly in agricultural and grassland areas that include plateaus, uplands, and plains, while 0.62 – 0.92 represents stable and very stable soils being found in forested areas, mountains and hills.

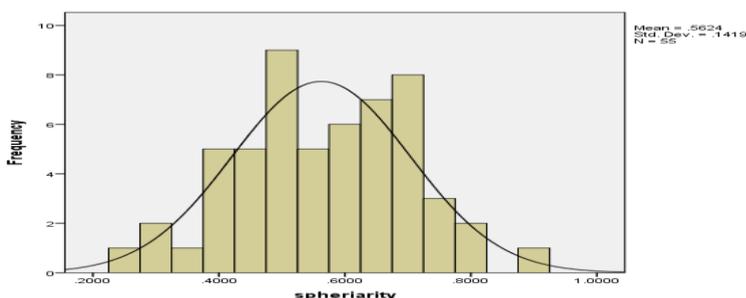
### 3.3: Exploring Data Characteristics

#### 3.3.1: The Histogram

Data was statistically analyzed in two phases: (1) data were described using the classical statistics (mean, mode, median, and standard deviation, coefficient of variation, skewness, and kurtosis); (2) frequency distribution was examined and the test for normality was conducted. Geostatistical methods are optimal when data are normally distributed and stationary that is when mean and variance do not vary significantly in Space as in this case. Significant deviations from normality and stationarity can cause problems, so it is always best to begin by looking at a histogram or similar plot to check for normality and a posting of the data values in space to check for significant trends. Looking at the histogram Figure 10 (with a normal density superimposed) and a normal quantile-quantile plot shows that the aggregate stability distribution does not deviate too severely from normality: Judging from Table 2, the distribution of data is close to normal with an almost zero skew and the mean being equal to the median. Aggregate stability values were collected from 55 sample points distributed throughout the field, which is approximately 8, 000 hectares.

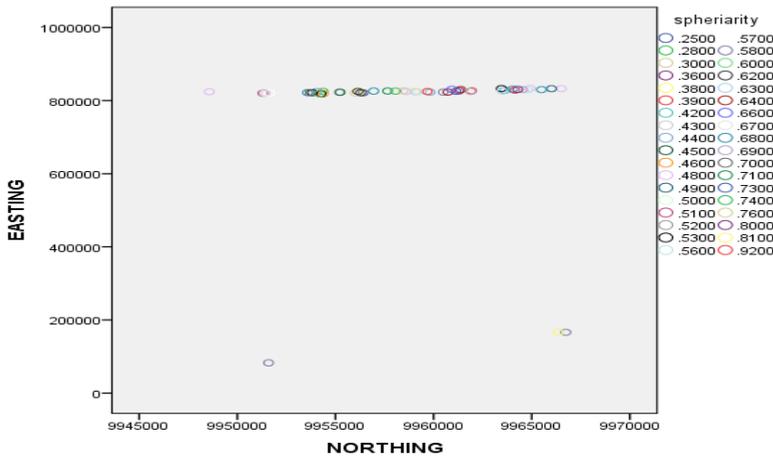
**Table 2: Distribution of Data**

Count	Min	Max	Median	Mean	Std. Dev	Skewness	Kurtosis	1 <sup>st</sup> Quantile	3 <sup>rd</sup> Quantile
55	0.250	0.920	0.560	0.557	0.138	-0.011	2.788	0.465	0.670



**Figure 10: Distribution of Aggregate stability data in Mean Weight Diameter (MWD)**

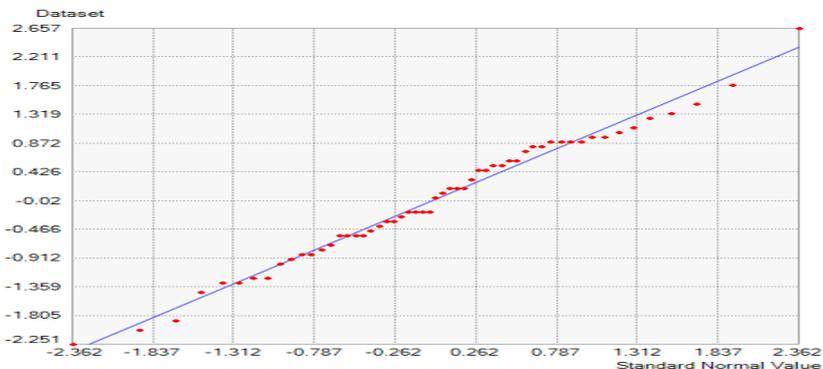
The determination of aggregate stability through the set of sieves involved the estimation of the amount of intact aggregates against the forces of water entry into aggregates, such as forces related to water entry in soil aggregates. It was generally considered that retention of large aggregates on the top sieve against forces of water entry was indicative of good aggregate stability. Therefore, the aggregate stability of the soil was evaluated as mean weight diameter (MWD) determined by the wet sieving. The MWD of the aggregates was calculated where the number of size fraction = the mean diameter of any particular size range of aggregates separated by sieving = the weight of aggregates in that size range as a fraction of the total dry weight of the sample analyzed. The values ranged from 0.25 to 0.92 MWD. Here are the data values posted at the Sample locations (Figure 11).



**Figure 11: Plotted Aggregate stability values according to their location**

**3.3.2: Normal Quantile - Quantile Plot**

The data was subjected to some normality checks with which Quantile - Quantile plot was a major test of normal distribution in the data. The data in this Q-Q plot appear to be normally distributed, because even though there is a slight, possibly curved trend in the plot, the dots are still pretty close enough to the line to not disqualify these data from being normal. The Q-Q plot (Figure 12) looks alright except for one outlier depicted by the point furthest to the right. All geostatistical methods assume spatial dependence that closer things are more similar than things that are farther away. Spatial dependence is "the propensity for nearby locations to influence each other and to possess similar attributes"(Tobler, 1989). In other words, to paraphrase this famous geographer, "while everything is related to everything else, things that are close together tend to be more related than things that are far apart". Terrain elevations and soil types for instance, are more likely to be similar at points few meters apart than at points several kilometers apart.



**Figure 12: Normal Q-Q plot**

Given that geographic data are expensive to create; spatial dependence turns out to be a very useful property. We can sample attributes at a limited number of locations, then estimate the attributes of intermediate locations. The process of estimating unknown values from nearby known values is called interpolation. Interpolated values are reliable only to the extent that the spatial dependence of the phenomenon can be assumed. If we were unable to assume some degree of spatial dependence, it would be impossible to represent continuous geographic phenomena in digital form.

**4.0 Conclusion**

The soils of the geomorphic units of mountains, hills and minor scarps were developed on volcanic ashes and other pyroclastic rocks of recent volcanoes. They had slopes ranging from 8-30 % and had stable to very stable soil aggregates. The plateaus (PU) (Agriculture and grasslands and the uplands (UP) (agriculture, grasslands and minor forests) were undulating with slopes of between 5 – 8%. The soils which were moderately stable were developed on volcanic ashes and other pyroclastic rocks of recent volcanoes. The plains (PL) (grasslands and agriculture) and Valleys (VA) (grasslands, agriculture and wetlands) were flat to very gently undulating in relief with moderately stable to unstable soil aggregates. They had slopes of between 0 – 2% with well drained, deep, and moderately deep to very deep soils.

The variability of aggregate stability exhibited spatial dependence that was described using semivariogram models. The Gaussian model was selected for fitting the data onto the semivariogram model. The spatial dependence (SPD) for the Gaussian exhibited positive asymmetric distribution giving a strong spatial dependence (SPD) and a strong spatial dependence index (SDI) indicated by  $SPD_{\text{Gaussian}} (\%) > 75\%$  and  $SDI_{\text{Gaussian}} (\%) \leq 25\%$ . The semivariogram models were used to undertake Empirical kriging to create spatial dependence prediction map of aggregate stability. The mean weight diameters (MWD) of 0.25 – 0.45 represented unstable soil aggregates, 0.55 – 0.62 moderately stable soil aggregates and 0.62 – 0.92 representing stable and very stable soil aggregates.

## References

- [1] Bigger, J.W. and Nielsen, D.R. 1976. Spatial Variability of the leaching characteristics of a field soil: *Water Resource Research*, **12**:78-84.
- [2] Biondi F, Myers DE, Avery CC.1994. Geostatistical modeling stem size and increment in an old-growth forest. *Can J For Res*.
- [4] Buol, S. W., F. D. Hole, R. J. McCracken and R. J. Southard, 1997. *Soil Genesis and Classification*. Iowa State University Press, Ames, Fourth Edition, 527 pp.
- [5] Cambardella, A, T. B. Moorman, J. M. Novak (1994) "Field scale variability of soil properties in central Iowa soils," *Soil Science Society of America Journal*, vol. 58, no. 5, pp. 1501–1511,
- [6] Cambardella, C. A. and D. L. Karlen, (1999). Spatial analysis of soil fertility parameters. *Precision Agriculture*, **1**: 5-14.
- [7] Campbell, J.B. 1978. Spatial Variation of sand content and pH within single contiguous delineations of two soil mapping units: *Soil Science Society of America Journal*, **42**:460-464.
- [8] Cassel, D. K. and Nielsen, D. R. 2000. Field capacity and available water capacity p. 906-926. In: A. Klute (ed.): *Methods of soil analysis, Part 1*. 2<sup>nd</sup> ed. Agron. Monogram. **9**: ASA, and SSSA, Madison, WI.
- [9] Cressie, N. 1985. Fitting variogram models by weighted least squares. *Journal of the international Association for mathematical Geology* **17**: 653-634
- [10] Cressie, N. 1988. Spatial prediction and ordinary kriging. *Mathematical Geology* **20**: 405-421 Erratum, *Mathematical Geology* **21**: 493-494.
- [11] Dercon, G., J. Deckers, G. Govers, J. Poesen, H. Sanchez, R. Vanegas, M. Ramirez and G.
- [12] Food and Agricultural Organisation/United Nations Educational, Scientific and Cultural Organisation. (1997). *Guidelines for soil profile description*, FAO. Rome.
- [13] Gajem, Y.M., Warrick, A.W. and Myer, D.E.1981. Spatial structure of soil physical properties of a Typic Torrifluent soil: *Science Society of America Journal*. **45**: 709-715.
- [14] Gaston, L.A., Locke, M.A., Zablutowicz, R. M. and Reddy, K.N. 2001. Spatial variability of soil properties and weed populations in the Mississippi Delta: *Soil Science Society of America Journal*. **65**: 449 – 459.
- [15] Isaaks, E.H. and Srivastava, R.M 1989. *An introduction to Applied Geo-statistics*. Oxford University Press, New York. 561 p.
- [16] Iqbal, J., Thomason, J.A., Jenkins, J.N., Owens, P.R. and Whisler, F.D. 2005. Spatial Variability of Soil Physical Properties of Alluvial Soils: *Soil Science Society of America Journal*. **69**: 1338-1350. *Soil and Water Management Conservation*.
- [17] Journel, A.G. and Huijbregts, C.J.1978. *Mining Geostatistics*. Academic Press, London. 600p.
- [18] Journel AG, Huijbregts CJ. (2003). *Mining Geostatistics*. Caldwell: Blackburn Press.
- [19] Stein, M.L. 1999. *Interpolation of spatial Data. Some Theory for Kriging*. Springer, New York, 247 p.
- [20] Lark, R. M., 2002. Optimized spatial sampling of soil for estimation of the variogram by maximum likelihood *Geoderma*, **105**: 49-80.
- [21] Zachary G. Mainuri and James O. Owino, 2014. Linking landforms and land use to land degradation in the Middle

- River Njoro Watershed. *International Soil and Water Conservation Research*, Vol. 2, No. 2, 2014, pp. 1-10
- [22] Mulla, D.J. and Schepers, J.S. 1997. Key processes and properties for site-specific soil and crop management.p.1-18.In F.J Pierce and E.J. Sandler (eds.) the site-specific management for agricultural systems: ASA, CSSA, and SSSA.Madison.WI.
- [23] Olea RA. 2006. A six-step practical approach to semivariogram modeling. *Stock Env Res Risk A*.
- [24] Ovalles, F.A. and Collins, M.E. 1988. Evaluation of soil variability in northwest Florida using geostatistics: *Soil Science Society of America Journal* **52**:1702 – 1708.
- [25] Ozgöz, 2009.“Long term conventional tillage effect on spatial variability of some soil physical properties,” *Journal of SustainableAgriculture*, vol. 33, no. 2, pp. 142–160.
- [26] Pohlmann, H. 1993. “Geostatistical modeling of environmental data, “*Catena*, vol. 20, no. 1-2, pp. 191–198.
- [27] Saldana, A., A. Stein and J. A. Zinck, (1998). Spatial variability of soil properties at different scales within three terraces of the Henares River (Spain). *Catena*, 33: 139-153.
- [28] Schimel, J.M, and H. Tian (2000), “Contribution of increasing CO2 and climate to carbon storage by ecosystems in the United States,” *Science*, vol. 287, no. 5460, pp. 2004–2006.
- [29] Stein, M.L. 1999. Interpolation of spatial Data. Some Theory for Kriging. Springer, New York, 247 p.
- [30] Stafford, J.V. (Editor). 1997. Precision agriculture. Proc. 1<sup>st</sup> European Conference on precision agriculture, Warwick, UK.BIOS Scientific Publishers. Oxford, United Kingdom.
- [31] Stutter M.I., Deeks, L.K. and Billett, M.F. 2004. Spatial variability in soil Ion exchange chemistry in a granitic upland catchments: *Soil Science Society of America journal*. **68**: 1304
- [32] -1314.
- [33] Tobler WR 1989. Frame independent spatial analysis. In Goodchild M G, Gopal S (eds) *The accuracy of spatial databases*. London, Taylor and Francis: 115–22
- [34] Trangmar, B. B., R. S. Yost and G. Uehara, 1985. Application of Geostatitics to spatial studies of soil properties. *Advanced Agronomy*, 38: 45-94.
- [35] Trangmar, B.B., Yost, R.S. and Uchara, G. 1986. Spatial dependence and interpolation of soil properties in West Sumatra, Indonesia: 1.Anisotropic variation: *Soil Science Society of America Journal*. **50**: 1391-1395.
- [36] Viscarra Rossell, R.A., and McBratney, A.B. 1997. Preliminary Experiments towards the evaluation of a suitable soil sensor for continuous ‘on-the-go’ field pH measurements.p.493-502. In J.V.Stafford (ed.): Precision agriculture. Proc.1<sup>st</sup> European conference on Precision Agriculture: Warwick, UK. BIOS Scientific Publishers, Oxford, UK.
- [37] Wang, Z. M. K. S. Song and B. Zhang, 2009. Spatial variability and affecting factors of soil nutrients in croplands of Northeast China: a case study in Dehui county,” *Plant, Soil and Environment*, vol. 55, no. 3, pp. 110–120.
- [38] Webster, R, (1985). Quantitative spatial analysis of soil in the field,” *Advances in Soil Science*, vol. 3, pp. 1–70,
- [39] Webster, R and M. A.Oliver, 1990. *Statistical Methods in Soil and Land Resource Survey*, Oxford University Press, Oxford, UK.
- [40] Yoder, R.E. 1936. A direct method of aggregate analysis of soil and a study of the physical nature of erosion losses: *Journal of American Society of Agronomy*, **28**:337-351.
- [41] Zanin, G., Berti, A. and Riello, L. 1998. Incorporation of weed spatial variability into the weed control decision-making process: *Weed Research*. **38**:107-118.
- [42] Zebarth, B. J., H. Rees, J. Walsh, L. Chow and D. J. Pennock, (2002). Soil variation within hummocky podzolic landscape under intensive potato production. *Geoderma*,110: 19-33.

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## The Necessity of Regional Economic Integration: a Lesson for South Asia?

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### Abstract

ASEAN and the European Union have showed this world the privileges regional economic integration provides the states. Although Greece and Italy might be the torchbearers of criticism against regional cooperation and integration, these two organizations tend to be some prime examples of necessity of regional economic integration. This dissertation thus focuses on the privileges and advantages that regional economic integration system and organizations deliver to the states aligned within. With the possible and crucial criticisms on mind, the discussion moves forward analyzing if this system is making the countries perform better economically and advance towards domestic development. The dissertation further intends to find out why the South Asian nations might need similar kind of cooperation and why these countries should act more sensible to make the economic integration possible. While remarking the recommendations, the discussion also draws the barriers and the problems that this region might face in order to integrate their economies or enhance their trades. The core argument of this dissertation therefore lies in analyzing the importance of regional economic integration and liberal economics in this modern world and if the South Asian countries need economic integration to develop their domestic economies. The recommendations are to provide the possible ways to run the process and the drawbacks portion mentions the difficulties and barriers to be faced whilst all of these countries' ongoing strict policies. The argument tries to find out the significance of liberal economics and tribulation of realism in the contemporary world.

**Keywords:** ASEAN, EU, Liberal, Cooperation, Failure, Protectionism

### 1. Introduction

What could be the absolute necessities for a country to follow in order to develop itself in this modern world? The answer to this question might end up being contested by various scholars. Different scholars and intellectuals have different opinions about the ways to live in the world. Countries of different regions and varying resources are not supposed to adopt similar ways in order to develop themselves. While having these thoughts in mind, it is very evident to seek the answer of the question of whether there is a general framework for development. A general framework can also be regarded as a way of policymaking in economic aspects that guarantees development. Certainly there is no criterion or a general framework for development. The two main approaches to explain trade are considered as Liberalism and Mercantilism (Goldstein & Pevehouse, 2009, p. 278). Mercantilism aligns with realism in the belief that states must protect its interests through exploiting others or anyhow getting benefitted from others (Goldstein & Pevehouse, 2009, p. 278). Mercantilism believes that states do not need international organizations for their development rather saving its gains is more necessary (Goldstein & Pevehouse, 2009, p. 278). On the other hand, Liberalism is the alternative approach that promotes creation of international organizations, institutions and norms (Goldstein & Pevehouse, 2009, p. 278). Liberalism believes in markets and economic globalization through interdependence thus economic integration evidently originates from the trade theory of Liberalism (Goldstein & Pevehouse, 2009, p. 309). The paper further focuses on exploring the privileges and challenges regional economic integration provides in the modern world. Case studies on ASEAN (Association of South East Asian Nations) and EU (European Union) are done on extensive efforts with a view to discovering the reality. It's an attempt to

find out a role model if one exists there. Barry Buzan (2016, p. 190) states that “the international economy is the main component and also the main consequence of the rising density and interdependence of the international system.” As interdependence exists to a great extent from the opinion of scholars, is it really necessary for every country to follow economic integration and regionalization in order to maintain a perfect balance in the economically interdependent world? The argument thus focuses on deriving information from ASEAN and European Union’s experiences and tries to implement its results on the case of South Asian countries.

## 2. The Idea of Regional Economic Integration

Regional integration is a process that provides a peaceful atmosphere where sovereign countries can voluntarily merge their efforts for obtaining mutual concern, regional interests and objectives (Roy & Dominguez, 2005, p.7). It is supposed to be “a space of conciliation between the creation of regional common goods and national interests, cultures, practices and policies (Roy & Dominguez, 2005, p. 7).” However the process of integration includes a series of necessary steps (McKay, Armengol & Pineau, 2004 p. 15). It is firstly necessary to find out what level of integration is wanted (McKay, Armengol & Pineau, 2004 p. 15). Secondly it is to be found out who are to be the participants of the integration (McKay, Armengol & Pineau, 2004 p. 15). In the third step, the participants will seek the degree of convergence needed for integration (McKay, Armengol & Pineau, 2004, p. 15). According to Karen Mingst (2001, p. 225), European Union has followed the path of functionalism in order to bind itself with regional integration. Goldstein & Pevehouse (2009, p. 353) also aligned with Karen Mingst to insist that regional integration is followed by the idea of functionalism. David Mitrany (1946, p. 7) stated that “The problem of our time is not how to keep the nations peacefully apart but how to bring them actively together.” The idea of integration is thus clarified by the above mentioned statements and definitions. When this integration is done in a specific region consisting of a bunch of specifically cited countries, it is called regional integration (mentioned as the definition of Roy & Dominguez). Economic integration follows the path of functionalism where “states form supranational institutions and create an economic society to promote free trade and coordinate economic policies (Goldstein & Pevehouse, 2009, pp. 352-353).” Prime examples of regional economic integration can be found out in the existence of NAFTA (North American Free Trade Agreement), EU (European Union) and APEC (Asia Pacific Economic Cooperation Forum) (Cole, Lyons & Cary, 1999, p. 70). Although not all scholars admit of ASEAN (Association of South East Asian Nations) as an example of regional economic integration, some acknowledge it as one (Fujita, 2007, p. 3). ASEAN has not yet developed a full regional integral framework as the EU, but it is on the path to do so in the future (Menon and Melendez, 2017). Regional free-trade areas, an aspect of regional economic integration, constitute a major part of world trade (Goldstein & Pevehouse, 2009, p. 293). A regional trade agreement allows the states to cooperate among themselves and therefore enables them to increase their wealth even if the rest of the world is standing still (Goldstein & Pevehouse, 2009, p. 293).

Regional economic integration, from the above definitions and statements, can be therefore derived as the creation of an economic community among specifically selected or enlisted countries who willfully participate to form supranational institutions in order to promote free trade and coordinate economic policies among themselves. Integration supposedly challenges the assumption which Realism provides that states are strictly self centered and they long for individual hegemony and power (Goldstein & Pevehouse, 2009, p. 353). Most policymakers deem that governments should embrace trade because it earns benefits for the nations and also the global economy including the individuals (Moon, 1998, p. 81). The concept suggests that exports provide employments for workers, earnings for business firms and profits that can be utilized for buying imports whereas the imports enhance the well being of civilians as it enables them to acquire more for their money and unavailable domestic resources only to be found out in foreign areas (Moon, 1998, p. 81).

## 3. East Asian Miracle and the Tiger Economies

According to Masahisa Fujita (2007, p. 4), East Asia has had the fastest economic growth from 1970 to 2000. In the 1970s, it was seen that most of the global south countries had enjoyed a real per capita GDP growth of almost 3 percent per annum where the per capita GDP is counted as the simplest measure of economic development (Goldstein & Pevehouse, 2009, p. 463). This economic development did not stall only in one region during the 1980s – Asia (Goldstein & Pevehouse, 2009, p. 463). From 1981 to 1991, China had an annual growth of 7 percent (Goldstein & Pevehouse, 2009, p. 463).

Before China’s sudden growth, some poor states known as Newly Industrializing Countries (NICs) started to attain self-sustained capital accretion whilst having an extraordinary economic growth (Amsden, 2001, p. 131). The export of light manufactured goods by these countries generated a solid economic development in the 1980s and early 1990s although it

was harmed by the 1997 Asian Financial Crisis (Goldstein & Pevehouse, 2009, p. 465). Nonetheless the crisis was soon recovered by these countries at a faster pace than the most global south countries (Goldstein & Pevehouse, 2009, p. 465).

Goldstein & Pevehouse (2009, p. 465) identifies the most successful NICs as the 'four tigers' or 'four dragons' – South Korea, Taiwan, Hong Kong and Singapore. All of these tiger economies were successful in creating development of particular competitive industries and sectors in the world market to make an impact in the world economy as a whole (Goldstein & Pevehouse, 2009, p. 465). A distributive to all economy was developed by these countries but scholars still engage in debate about whether these tiger economies' achievement is a hoax or it was done under a systematic approach (Goldstein & Pevehouse, 2009, p. 465). For South Korea, the key resource was iron and coal – a more similar one like the three European giants as we would see in this paper later (Goldstein & Pevehouse, 2009, p. 465). Hyundai, Kia, Daewoo and other industries of South Korea has generated a huge amount of money from the world market through the export of cars and trucks while the South Korean government showed extreme strictness to the firms that were poorly administered (Amsden, 1989, p. 15). The example is shown by Amsden (1989, p. 15) as the major automobile industries share holder Shinjin's disappearance from the market after the Oil shock of 1970s. Construction firm of Kyungnam and the electronics firm of Taihan group had to be either merged with or sold to Daewoo (Amsden, 1989, p. 15). The South Korean government dictated industrial policy strongly in an attempt to promote and protect the successful industries while showing stringency to the poorly managed firms (Amsden, 1989, p. 15). By the middle of the 1990s therefore, South Korea had earned a per capita income level equal to the per capita income of Spain (Goldstein & Pevehouse, 2009, p. 465). South Korea later decided to move its production factory to Britain where the costs are lesser and cooperate with the United States to form a free trade area in order to sustain its growth through free economic movement which contributed to its sustainable economic growth (Goldstein & Pevehouse, 2009, p. 466).

Taiwan also followed a strong industrial policy and it has been enriched with successful electronics and computer firms that have helped Taiwan to possess one of the largest hard-currency reserves of the world (Goldstein & Pevehouse, 2009, p. 466). Hong Kong, another tiger economy, had its rise to a developed economy through its electronics and other light industries but most contribution came from the banking and trade between Southern China and the rest of the world (Goldstein & Pevehouse, 2009, p. 466). Singapore is geopolitically considered a trading hub and similar to Hong Kong, it also drew MNCs to set up headquarters there on the basis of its trading hub identification (Goldstein & Pevehouse, 2009, p. 466). South Korea and Taiwan both have sprinted towards a higher economy despite their political conflicts at the borders (Goldstein & Pevehouse, 2009, p. 466). Hong Kong and Singapore are merely city-states and are considered essential as trading ports and financial centers (Goldstein & Pevehouse, 2009, p. 466).

Other Southeast Asian countries – Thailand, Malaysia and Indonesia have endeavored to follow the track of these four Asian tigers from the 1980s (Goldstein & Pevehouse, 2009, p. 466). Under Deng Xiaoping in 1976, China adopted capitalism as the economic institution system through individual farming of peasants and allowing foreign direct investment through an open trading system (Goldstein & Pevehouse, 2009, p. 467). China's economic growth has been miraculous comparing to the previous times since the adoption of these new policies (Goldstein & Pevehouse, 2009, p. 467). Inflation and corruption erupted revolutions and later subsequent economic reformations contributed to a 12 percent annual growth of China by 1994 (Goldstein & Pevehouse, 2009, p. 467). China was able to sustain itself during the 1997 Asian Financial Crisis when most of the countries succumbed to depression and by 2006 it had an annual growth of 10 percent under the rule of invigorated leaders like Hu Jintao (Goldstein & Pevehouse, 2009, p. 467). The economic development of the four tigers and the three other Southeast Asian states in the late twentieth century alongside the Chinese economic revival after the 1980s is collectively termed as the East Asian Miracle.

#### 4. The Path that Realism Shows

Liberals perceive peace as the general state of affairs (Burchill, 2001, p. 33). Mercantilism, the economic idea of Realism, is intimately tied with the emergence of modern sovereign state (Jackson & Sørensen, 1999, p. 178). It is the first view of trade other than liberalism (Goldstein & Pevehouse, 2009, p. 278). Mercantilism bases its idea on creating a strong powerful state with great prowess (Jackson & Sørensen, 1999, p. 179). It is however the oldest approach to international political economy (Mingst, 2001, p. 184). According to the traditional mercantilists, "A Surplus balance of payments is critical to protect the national interest (Mingst, 2001, p. 185)." Mercantilists view economy as 'low politics' (Steans, Pettiford, Diez & El-Anis., 2010, p. 65). As the features of high politics, war and diplomacy determine economics (Mingst, 2001, p. 185). The view of trade and interdependence is seen through two visions (Nye & Welch, 2015, p. 275). These two visions are conveyed as 'zero-sum' game and 'non-zero sum' game (Nye & Welch, 2015, p. 275). Mercantilists view trade as a zero-

sum game where one side gains the amount the other side loses (Jackson & Sørensen, 1999, p. 178). Liberals view trade as a non-zero sum game where both parties win and thus make it a positive sum-game (Jackson & Sørensen, 1999, p. 183). Another aspect suggests non-zero sum game where both parties lose and therefore make it a negative sum game (Nye & Welch, 2015, p. 275). The idea of interdependence and trade therefore varies within these two perceptions. Mercantilists view trade and interdependence skeptically while liberals view them as beneficiary according to the perceptual varieties.

Mercantilism can be followed in two ways (Jackson & Sørensen, 1999, p. 178). The first way is called 'benign mercantilism' where states only look further to save and protect their national interests keeping the realist assumption intact that individual development is the key goal according to Jackson & Sørensen (1999, p. 178). The second one is called 'aggressive or malevolent mercantilism' by Jackson & Sørensen (1999, pp. 178-179) where states attempt to exploit other states or international economy through protecting its own interests, gaining the maximum advantage and creating an expansionary strategy to be more powerful.

According to Goldstein & Pevehouse (2009, p. 279), the mercantilist view stands correct as in international trade, one or the other party benefits more from a trade. Realism thus shows the path of protectionism in an extensive aspect as it contradicts with the ideas of liberalism (Goldstein & Pevehouse, 2009, p. 287). Under the conditions of protectionism, states seek to benefit the domestic industries or companies through preventing import of competing foreign goods (Goldstein, 1986, p. 161). When a government follows protectionism, it might be a fact that the policy was taken owing to a lobbying by a domestic industry (Goldstein & Pevehouse, 2009, p. 287). It is however sometimes evident that temporary protectionism for infant industries has been proved to be successful in the cases of South Korean automobile manufacturers (Goldstein & Pevehouse, 2009, p. 287). The core component of realism found in the idea of protectionism is the fear of the state which can be derived from the aforementioned statements. Realism views the world surrounded by anarchy and thus the states fear each other and distrust prevails (Steans, Pettiford, Diez & El-Anis., 2010, p. 57). Deriving from this, from the perspective of realists, the world is in an anarchic condition and the states vie with each other for power and they are always indulged in a vicious quest of maneuvering power (Steans, Pettiford, Diez & El-Anis., 2010, p. 57). Protectionism mainly covers four aspects or versions which have been or are still being followed by various states (Goldstein & Pevehouse, 2009, p. 288). The first is known as a tariff, which defines a tax entailed upon certain imported goods to enter the buyer country (Goldstein & Pevehouse, 2009, p. 288). The second one can be derived as non-tariff barriers which imply a limit on imports by forming a quota system and binding import of the good to a specific or limited number (Goldstein & Pevehouse, 2009, p. 289). The third way is called the system of subsidizing where the government provides an amount of security money or resources or somehow subsidize the loss faced by an industry to compete with the importer foreign industry (Goldstein & Pevehouse, 2009, p. 289). Subsidies sometimes make the domestic industries complacent and this inflicts the industry's competitiveness to a great extent and it is more or less ineffective to make a domestic industry win against a foreign importer (Goldstein & Pevehouse, 2009, p. 289). The fourth way is known as restriction and regulations which affect the foreign importer to face many restrictions and difficulties to transfer or market his product (Goldstein & Pevehouse, 2009, p. 289). Mercantilism was previously known as Economic nationalism in the late 1800s and early 1900s (Steans, Pettiford, Diez & El-Anis., 2010, p. 66-67). Economic nationalism had previously followed a strict posture of protectionism and the examples of protectionism can be found in the 'beggar thy neighbor' policy taken by the United States government prior to the World War II (Steans, Pettiford, Diez & El-Anis., 2010, p. 67).

Another aspect of mercantilism is autarky which makes the weak states prevent becoming dependent on stronger ones (Goldstein & Pevehouse, 2009, p. 286). Autarky is the idea where states produce every good by itself and it denies trade to obtain self-reliance (Goldstein & Pevehouse, 2009, p. 286). The state of Albania had followed autarky and it found itself economically naive in the early 1991 when its autarky had ended due to the fall of communist rule (Goldstein & Pevehouse, 2009, pp. 286-287). China under Mao Zedong and the current flows of North Korea follow self-reliance or autarky (Goldstein & Pevehouse, 2009, p. 287). Autarky has been proven ineffective historically and evidence of Albanian development after 1991 and the Chinese economic miracle after opening up in the 1980s shows the inefficiency of autarky (Goldstein & Pevehouse, 2009, p. 286-287). The idea of autarky therefore is derived from mercantilism that the strong states exploit the weaker states through trade and instead of trading to gain comparative advantage, it rather suggests on obtaining self-reliance. The aspects of comparative advantage are discussed in the latter portion. Protectionism does not always cause harm (Goldstein & Pevehouse, 2009, p. 289). Most often it helps producers and affects customers (Goldstein & Pevehouse, 2009, p. 289). One problem of protectionism suggests that it makes industries ineffective and less competitive which in turn affects the state (Goldstein & Pevehouse, 2009, p. 289). However, some scholars suggest that temporary protectionism

can stabilize one industry which benefits the domestic producers and this thought is proved by the example of Harley Davidson industries (Goldstein & Pevehouse, 2009, p. 289). The US government had subsidized the Harley Davidson Motorcycle company by imposing tariffs upon Japanese motorcycles to compete with the Japanese manufacturers where the company was threatened with losing its market to the Japanese industries and further it improved its quality (Goldstein & Pevehouse, 2009, p. 289). This helped the company to sustain itself in the market and a domestic industry was saved from going astray.

This is the path that Realism shows with the ideas of autarky and protectionism alongside the zero sum measurement. The aforementioned statements show that protectionism does not deny trade but it obviously hampers the harmonious idea of trade. Realism's skeptical view is not shared by most but internalized by many countries in the contemporary world through protectionism (Moon, 1998, p. 86). Many forms of protectionism have been introduced in the world in the past decades as governments have reacted positively to the requests of threatened industries (Moon, 1998, p. 86). Even the United States and its newly elected President Donald Trump promoted an idea of 'Buy American' which was evidently a sign of protectionist policy (Waldmeir and Donnan, 2017). Mercantilists are afraid that massive amount of imports allow foreigners to consume more employment and revenues from production that would have gone to citizens of the home country if trade was not allowed (Moon, 1998, p. 84). From an economic nationalist or mercantilist view, a regional free trade area is seen as a source that augments a region's prowess at the losing or expense of other areas of the world (Goldstein & Pevehouse, 2009, p. 293). Autarky's history leads us to the firm belief that it's inefficiency and its experience is tormented with failure. Thus it does not remain as an option for a country's economic development. With these aspects of this discussion, a question evidently appears. The question can be identified as – 'Does Liberalism and Regional Economic Integration provide more amount of benefits than protectionism and mercantile exploitation?'

## 5. European Union

What was Europe doing back in the previous centuries? Europe has been the birthplace of Protestantism – a counter revolution to the Holy Roman Empire's religious-political hegemony; the bloody Thirty Years War; the French Revolution; the Industrial Revolution and Capitalism; 1848 People's Revolutions; the ideologies of Marxism, Fascism, Nazism, Social Darwinism, Racial Greatness, Liberalism and modern statehood; Colonialism and Imperialism; the most contentiously gory wars of all time – World War I and World War II (Mason, 2011). During the Cold War period after the World War II, Europe was divided into two parts – the capitalist bloc and the communist bloc, the first led by the United States of America (USA) and the latter one led by the United Soviet Socialist Republic (USSR) or, more clearly known as the Soviet Union (Mason, 2011, p. 143). The Cold War began centering on the German city of Berlin where a wall was constructed and it demarcated the borderline of the two blocs (Mason, 2011, p. 143).

With these new structural conditions and ruined geographical situations, Europe's capitalist bloc attempted to demonstrate the century-old idea of a united Europe of Immanuel Kant and Jean-Jacques Rousseau into reality through forming institutions and trading communities (Mingst, 2001, p. 196). According to David S. Mason (2011, p. 179), the EU's current embodiment is the successor of an idea occasionally called the European Common Market. Destructed by the vicious war, Europe was assisted with aid from the United States through the initiation of Marshall Plan (Goldstein & Pevehouse, 2009, p. 354). Two French leaders Jean Monnet and Robert Schuman initiated the plan of executing the idea of functionalism which would tie the states altogether politically for economic interests and collective development eventually preventing war and competition among themselves (Goldstein & Pevehouse, 2009, p. 354). Schuman planned to integrate German and French steel and coal industries as coal and steel was deemed important for European recuperation (Goldstein & Pevehouse, 2009, p. 354). The integration formed a single framework able to efficiently use the two states' necessary resources and eventually the Schuman Plan in 1952 led the emergence of European Coal and Steel Community (ECSC) (Goldstein & Pevehouse, 2009, pp. 354-355). ECSC consisted of Germany and France – the two previously mentioned countries and Italy (the third huge industrial country of continental Europe), Belgium, Netherlands, Luxembourg (altogether known as BENELUX) (Goldstein & Pevehouse, 2009, p. 355). Previously in his famous 'Iron Curtain' speech, Winston Churchill wished for a United Europe but he did not wish the Great Britain to be included in the union rather he focused on the seventy five years power feud between Germany and France to be eliminated (Mason, 2011, p. 180). The incentive of the formation of ECSC was followed by an idea where elimination of barriers to trade of coal and steel was at the core of the formulation (Mason, 2011, p. 181). The ECSC followed a core liberal assumption that the best producer owns the market and a fully competitive market should emerge in order to have the best outcome of all the producers. A quality production could save the downed economy of the Europe and this is what was at the focus of this integration. Coal and

steel were backbones of the industrial economies of Europe and abolition of trade barriers would thus provide efficient production of these two products which might create a path for European recovery (Mason, 2011, p. 181). The facilitation of this process was organized by the 'High Authority' – a supranational controller of the coal and steel industries of all these six states with its headquarters in Luxembourg (Mason, 2011, p. 181). Representation from all states was confirmed and decisions were taken on the basis of majority votes where it could create norms going against interests of one or more country, but the liberal idea bound everyone to that obligation (Mason, 2011, pp. 181-182). Alongside administering production, marketing and prices, the administration also aided weaker producers with modern technologies, readapting and conversion (Mason, 2011, p. 182).

However, in 1957, the same six countries signed the Treaty of Rome that created two new organizations – European Economic Community (EEC) and the EURATOM (Mingst, 2001, p. 196). The reason behind this was probably ECSC's huge success in both economic and political aspects (Mason, 2011, p. 182). The aim was directed at free movement of capital and labor within the member countries (Mason, 2011, p. 182).

The triumph of EEC ultimately led to the integration of all these institutions in 1967 (Mason, 2011, p. 182). The integrated institutions were named 'European Community (EC) and within 1968, all internal tariff barriers were eliminated (Mason, 2011, p. 182). In between mid 1960s and mid 1980s, economic development was dormant which ultimately led the institutions to some reformations (Mingst, 2001, p. 197). As a part of this reformation, the original six countries saw expansion of the community – Denmark, the United Kingdom and Republic of Ireland attached to the EC in 1973; Greece in 1981; Portugal and Spain in 1986; and Austria, Finland and Sweden in 1995 (Mingst, 2001, p. 197). The greatest expansion was seen in 2004 with the joining of 10 new countries to the European Union - Poland, Czech Republic, Slovakia, Hungary, Slovenia, Estonia, Latvia, Lithuania, Malta and Cyprus (Goldstein & Pevehouse, 2009, p. 364). Bulgaria and Romania joined the organization in 2007 (Goldstein & Pevehouse, 2009, p. 366).

Political union of these countries was sought and through the signing of Maastricht Treaty in 1992, the formal emergence of European Union happened replacing the previously European Economic Community where the founding of common foreign and defense policies, a single currency and a regional central bank were at the focus of the discussion (Mingst, 2001, p. 197). This treaty ultimately made the European Union a complicated organization with three key pillars (Mingst, 2001, p. 198). As Karen Mingst (2001, p. 200) put up many questions about the European Union's ultimate future and its possibilities, it can be asserted that only the economic union was well desired by all the member states. The want of a political union made these things diversely complicated. The questions of ethnicities, integrating key policies and the question of what kind of integration therefore appeared at the face of European Union (Mingst, 2001, p. 199). One example of the problem of political union can be drawn from the event of 2008, when Kosovo declared its unilateral independence from the former Yugoslavia dividing the EU into two parts (Simms, 2014, p. 521). 22 member states affirmed the recognition whereas Greece, Cyprus, Spain, Romania and Slovakia refused to recognize Kosovo owing to their own demographic diversity and separatist rebel group problems (Simms, 2014, p. 521).

## 6. Wonder at Hand?

The positive sides of this economic integration are many. From the theoretical analysis and explanations from the previous parts, we can say that free trade and competition makes the market better and the most effective one. When there is competition among the sellers or the producers, they have to perform the best in order to survive in the market. He, who fails to intensify and improvise his products at the best of costs, fails to survive in the market. Survival of the fittest in this case is exemplary. Free trade also contemporizes us with the concept of comparative advantage. Comparative advantage means specialization of production according to the distribution of resources. States do not possess the similar natural resources to produce certain goods (Goldstein & Pevehouse, 2009, p. 282). Thus in order to maximize the all over creation of wealth, every state individually should focus on producing certain goods that delivers it a comparative advantage and trade with others in order to fulfill the deficit of other necessary goods (Goldstein & Pevehouse, 2009, p. 282). The European Union or say any regional economic integration is therefore the tool to promote free trade and have comparative advantage of every country in a single market without any trade barriers or tariffs. The idea of infinite resources in economics has long gone by and it is now universally acknowledged that resources are finite in this world. In this world of finite resources where all individual countries possess different sorts of natural resources, comparative advantage is the best solution for all. European Union specializes on doing that. Through the promotion of comparative advantage, it also eliminates the less competitive and less productive sellers who do not stand to deliver the best services and utility for the combined European citizens. Goldstein & Pevehouse (2009, pp. 282-283) explains the benefit of comparative advantage through the example

of Saudi Arabia and Japan and the products of oil and cars. Saudi Arabia has a specialization in oil production whereas Japan can efficiently produce cars. Now if Saudi Arabia delivers oil to Japan through free trade and Japan trades cars with Saudi Arabia, Japan can fulfill its lack of oil production and Saudi Arabia's demand for cars also gets complied. If Saudi Arabia, instead of trading oil and cars, intends to produce cars by themselves, they will be able to produce it, but it would cost a lot of money. If Japan wants to produce oil, Japan would also face an economic downfall overall because they don't have the resources and the industries to produce the goods at the quality of what their opposites can and also at the price or cost of Saudi Arabia. So trading is the best option here to avoid the cost inefficiency. Similarly, if Germany supposedly is better at producing cars or electric utilities, it is somewhat poor in raw materials. If the Baltic countries can export their raw materials to Germany without a tariff barrier, the Baltic countries can have a good amount of profit at a less amount of selling price to Germany. Later these Baltic countries can have the cars that have been produced by Germany. If the Baltic countries moved towards producing cars, a secondary level of industry, their economy might succumb to an economic destruction. Thus this idea of comparative advantage is realized thoroughly in the European Union and EU actually makes countries better through free trade, utilization of finite resources and efficiency of producers through providing perfectly competitive market.

However, according to Daron Acemoglu and James A. Robinson (2013), inclusive institutions are the key to sustainable economic development. Many countries have developed for a limited time with an imperfect growth that has later experienced a sudden downfall. European Union, through its transparent bureaucracy and structures, provides an inclusive economic and political institution system for all the EU member states' citizens making them European citizens. This is also a positive aspect of why regional economic integration with an inclusive and transparent institution system is necessary. Interests in the European Union are therefore intertwined and no country dares to act on its own, making the countries care for others for the sake of their own interests. Participation of all countries are necessary with a voting system and without one country's ratification, the decisions do not get completed and every single member of the union matters in the decision making process.

In the events of environmental issues and other aspects, the multilateralism of EU is very effective to save everyone's interests and thus to act as a single actor. We have seen the emphasis of a European integration in the words of Rousseau and Kant. George Kennan (Simms, 2014, p. 381) insisted that "If there is no real European integration and if Germany is restored as a strong and independent country, we must expect another attempt at German domination. If there is no real European federation and if Germany is not restored as an independent country, we invite Russian domination... This being the case, it is evident that the relationship of Germany to the other countries of western Europe must be so arranged as to provide mechanical and automatic safeguards against any unscrupulous exploitation of Germany's pre-eminence in population and in military-industrial potential." His emphasis on a European integration for preserving peace in Europe was voiced in the 2012 Nobel Peace Prize winning of the European Union (Epatko, 2012). The historical rivals France and Germany cooperated with each other for about sixty years and no further conflict ever escalated between them. Peace could be retained because of this economic integration and integrated development of the two countries altogether. If these two countries had to compete against each other for economic superiority (as economy is the key instrument that can guarantee defense, welfare and all other expenditures), the scenario would have been similar to the Cold War. When included in an integrated economy, the interests of the member states are interweaved and all countries aim for integrated development, leaving the idea of individual betterment aside.

## **7. Fate of the Forlorn Sons: Story of Greece, Ireland and Others**

Europe faced a big crisis in 2010, when Greece was hit by a financial crisis frightening it with a permanent destabilization (Mason, 2011, p. 189). Greece had to cut its expenditure on welfare, social services and retired employees to overcome its debts (Mason, 2011, p. 189). This infuriated the public of Greece and the EU allotted 80 billion Euros to stabilize Greece (Mason, 2011, p. 189). This bailing out of Greece was also skeptically assumed by the leaders in different EU states as pointing out to why would the Germans, the British, the French and the others would have to compensate for the vice of the Greeks.

The collective effect of the economic crisis, governmental ineptitude, lower tax submissions, organized tax fudging and huge euro-dominated debts swelled owing to lower interest rates by the monetary union that affected the 'PIIGS' – Portugal, Ireland, Italy, Greece and Spain (Simms, 2014, p. 525). While Greece scrambled over the social service cuts, Ireland was more submissive to the EU austerity measures in a hope that it would bail them out if it cut its expenses (Simms, 2014, p. 525). Portugal, Italy and Spain stood on the brink of collapse while there was also dubiety against the core country of

Belgium (Simms, 2014, pp. 525-526). Owing to these events, the EU was at a diffident position and by 2011 Europe had begun to experience a financial meltdown (Simms, 2014, p. 526).

Euroskepticism also mounted in the countries of Hungary, the UK, the Netherlands, and France as Janos Kadar conquered Hungary's politics but Geert Wuiders failed to garner votes through populist agendas of EU exit (Boffey, 2017). As such, economic integration is currently threatened with the ideas of self-interest, individual development and survival of individual. The Europe, which was pioneering and making others learn about collective development and free trade, now seems to be in decay with a protectionist agenda in advent.

## 8. The Progress of ASEAN

ASEAN is considered as the leading organization in the Asia Pacific for Free Trade Area (FTA) formation (Tangkitvanich & Rattanakhmfu, 2017). The ASEAN FTA was initiated in 1993 and the year 2015 saw the emergence of ASEAN Economic Community (AEC), a similar version of EEC (Tangkitvanich & Rattanakhmfu, 2017). While ASEAN's success in managing regional conflicts and organizing regional cooperation has been very much applauded, its EC still has a long way to go in order to fulfill the procedure (Tangkitvanich & Rattanakhmfu, 2017). In 1967, ASEAN was formed by Indonesia, Singapore, Malaysia, the Philippines and Thailand (Blaxland, 2017). It was expanded to consisting of 10 member states during the 1980s and the 1990s – Brunei, Vietnam, Cambodia, Laos and Myanmar as the new members (Blaxland, 2017).

Till now from economic perspective and for development purposes, ASEAN has been triumphant in only one aspect – elimination of tariff barriers (Tangkitvanich & Rattanakhmfu, 2017). The signing of CEPTA (Common Effective Preferential Tariff Agreement) in the 1990s ultimately led to the reduction of 99 percent tariff lines to 0 (Tangkitvanich & Rattanakhmfu, 2017). However the existence of Thai-Cambodian border skirmishes and other interregional conflicts makes the future of ASEAN look more pale (Acharya, 2011). According to Amitabh Acharya (2011), surviving is not the same as thriving and till now ASEAN states have some conflicts with each other going on, a very unusual practice than the EU.

The 1997 Asian Financial Crisis hit the East Asian countries hard; although China was able to escape the negative impacts of the crisis, the Asian crisis left Thailand, South Korea and Indonesia incapable of defending their currencies from collapse (Drysdale, Armstrong, Ascione, Manuel & Mowbray-Tsutsumi, 2016). This crisis taught the East Asian countries a proper lesson and thus these economies moved toward amassing a huge foreign exchange reserve of USD 11 Trillion known as - Chiang Mai Initiative (CMI) (Drysdale, Armstrong, Ascione, Manuel & Mowbray-Tsutsumi, 2016). The East Asian countries successfully survived the 2008 financial crisis and till now no country has been forced to draw funds from the CMI (Drysdale, Armstrong, Ascione, Manuel & Mowbray-Tsutsumi, 2016). Although the fund consists of USD 240 Billion as of 2012, it is not sufficient to overcome a financial crisis (Drysdale, Armstrong, Ascione, Manuel & Mowbray-Tsutsumi, 2016).

The dominance of the East Asian Newly Industrializing Countries has grown by time to time. They have dominated the manufacturing and export of products for the less developed countries (Haggard, 1995, p. 46). Developing countries can be enjoined through a group or integration and deep integration agenda mostly dominates the group of advanced developing countries – in this case the East Asian region (Haggard, 1995, p. 8). Korea, Taiwan, Hong Kong, Singapore, Malaysia, Indonesia and Thailand (Only the Philippines stands out) has been following an export oriented development trajectory since the 1990s following the path of the four Asian Tigers (Haggard, 1995, p. 9). The export success of these countries has ultimately bred conflicts with their major trading partners – specially the USA and this success has undoubtedly moved them upwards in the course of economic development (Haggard, 1995, p. 9).

The colonial experience is not a forgotten one for these countries yet overcoming the colonial exploitation that left them unstructured, uncivilized and destructed was possible for them. Despite the political turmoil and scarcity of resources and proper institutions, the lesson that these countries learned and the quick counter they poised towards the Western and developed countries is undoubtedly a phenomenal experience for the economic history of the world.

ASEAN now stands with a collective GDP of USD 2.5 trillion and Intra-ASEAN trade is 545 billion USD (Blaxland, 2017). However, the limited success of the AEC (only tariff reduction) makes everyone including scholars and analysts very much skeptic and doubtful about its success in the future. It is to be mentioned that only one of the ASEAN countries - Singapore belongs to the Asian tigers group. Rest of the countries are still counted as emerging economies rather than advanced developed economies.

## 9. South Asian Dilemma

The fear of losing national industries and home grown companies in the domestic market itself has been evident in the previous discussions and the procedure of following 'protectionism' has also been mentioned. When governments panic due to the appearance of new sellers from outside countries and their efficiency of providing much better quality than the domestic sellers, they impose tariffs on the specific products which are needed to protect the domestic businessmen or companies. The trade dilemma of India has been regularly hampered by this fear and protectionism is a regular activity of India being the world's most eminent safeguard measures user (Park, 2016).

India is a similarly large state like China and it therefore earns a special attention (Goldstein & Pevehouse, 2009, p. 470). India's yearly growth in 2003 was measured to be around 8 percent (Goldstein & Pevehouse, 2009, p. 471). The South Asian economic integration lacks pace because of the existence of historical rivals of Pakistan and India which has underpinned tariff barriers between these two states (Iqbal & Nawaz, 2016). As previously explored in the paper, comparative advantage benefits the smaller countries relatively more as the bigger the country, the more the resources. Despite being a huge country, India aimed at cooperating with Pakistan through providing it the MFN (Most Favored Nation) status in 1995 and Pakistan did not cooperate until 2011 (Iqbal & Nawaz, 2016). While India has recently strained its relations with Nepal, it moved forward to economically cooperate with Bangladesh (Maini, 2016). Bangladesh therefore imports energy and power production from India (Maini, 2016). Smaller countries of this region – Bhutan, Nepal and Sri Lanka can also benefit from the powerhouse of this region - India. The recent developments in Bangladesh-India trade relations provide the proof that both countries are opening up to bilateral trade denying protectionism (Maini, 2016). Under the current governments, Bangladesh and India have significantly advanced on trade, investment and communication cooperation (Zaman, 2017). The barrier which comes in front now is the stringent Indo-Pak relations.

## 10. What Lies Ahead

The discussion on the historical evolution of the European Union shows us one similarity or continuity - the expansion of the union. Time and again, we can see that new members for the union have arrived. The Union started with only six members and currently it consists of 28 members. Although the Great Britain is leaving the union making it a union of 27 countries through the procedure of Brexit Referendum, more countries are still interested to be included in the union (Nougayrède, 2017). In 2013, Croatia was the last country to enter the union (Bilefsky, 2013). In 2007, Ukraine was interested in reforming its economics and civil society to deliver a membership bid for the union (Simms, 2014, p. 520). In April 2008, Macedonia was promised to be counted for an invitation if it could have ended its dispute with Greece (Simms, 2014, p. 521). Bosnia and Montenegro alongside Ukraine and Georgia were also told that new membership in the future for these countries is possible (Simms, 2014, p. 521). Bosnia and Montenegro were thus invited to start intensified dialogues to prepare for a future membership through structuring the country (Simms, 2014, p. 521). Turkey has also been very keen to join the union although the Europeans have been cynic about the Turkish inclusion (Mowat, 2016). George Friedman's prediction (2010, p. 116) however seems irrelevant now as it was the UK, not Germany who sent troops to Estonia to engage in power politics and deter the Russian federation (Willets, 2017).

The argument for EU to consider it as a wonder of economic development can be found in the British insertion into the union. In 1950, Britain was plagued with expenditure on international crises (Simms, 2014, p. 416). The World War II left the UK economically depressed and this was not the ideal time to engage in liberating people from the clutch of communism. Expenditures on defense fearing a Soviet invasion of Europe, the UK had to cut its domestic spending (Simms, 2014, p. 416). The massive defense expenditure caused a balance-of-payments crisis in the UK and saw the Minister of Labor, Aneurin Bevan resigning from the office (Simms, 2014, pp. 416-417). In 1956, the loss of the Suez Canal also caused a Pound Sterling crisis in Britain and France was also hit hard by the loss which ultimately provided an impulse to European integration project (Simms, 2014, p. 426). In 1973, after the Yom Kippur War between the Arabs and Israel, the oil producer Arab countries decided to reduce their oil production and announced an oil embargo against the collaborators of Israel (Simms, 2014, p. 456). This financial recession of 1973 ultimately saw Britain devastated and it then realized that it couldn't walk the economic path alone. Great Britain's great realization and eventual inclusion into the union gives us ample thoughts to recognize the positive side of European economic integration or in simple words, the European Union.

The future of AEC is very much ambiguous and it is very tough to be predicted as explained in the previous parts. However, South Asian economic integration might see sunrise as Bangladesh and India, both the countries are moving towards economic cooperation which in turn may inspire the other countries. SAARC is not the only hope in the region as the desire

is also evident in the newly formed BIMSTEC. Narendra Modi's arrival in India is also inspiring new South Asian regional and global integration (Gupta, 2015).

## 11. Conclusion

It is very much evident from the history that the reason of forming an economic union eliminating trade barriers was the lesson learnt from the harrowing memory of the Second World War that left the whole Europe devastated both economically and structurally. The trade union helped it recover its economy and through the economic integration, it was about to fight back in this world. But looks like people tend to forget the mischief and sorrows of themselves which ultimately leads them to be suicidal about the peace that they had garnered owing to that sorrowful experience of mischief. Similar thought was explored by Brendan Simms (2015, pp. 508-509) – “As the memory of the Second World War and the Soviet threat faded, peoples of Europe were becoming increasingly suspicious of EU ‘bureaucracy’, and sceptical of the need to sacrifice their national sovereignty”. This thought might have been criticized by many but the thought looks a very real and prudent one as we have already witnessed the Brexit or Great Britain's exit from the European Union. The economic union may embrace decay in the coming days owing to the growing skepticism about the long peace it has provided but it might be too late to realize the benefits the union had provided. The final line thus may surprise all – no EU member has fought against each other in a violent armed conflict so far but things don't look like to acknowledge this wonderful fact. However, the tribulation of Realism doesn't seem to be evident rather regional economic integration creates regions as individual states and the realist view on regional integration is rather found to be prominent in the existence of EU and ASEAN from the collected information as countries do not intend to scamper towards an integrated world economy, rather regional cohesion for self-economic development through realizing comparative advantage.

## References:

- [1] Acemoglu, D., & Robinson, J. (2013). *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. London: Profile Books Ltd.
- [2] Acharya, A. (2011). *ASEAN in 2030*. *East Asia Forum*. Retrieved 25 August 2017, from <http://www.eastasiaforum.org/2011/02/15/asean-in-2030/>
- [3] Amsden, A. (1989). *Asia's next giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- [4] Amsden, A. (2001). *The rise of "The Rest": Challenges to the West from Late-Industrializing Economies*. New York: Oxford University Press.
- [5] Bilefsky, D. (2013). Joyous Croatia Joins Europe Amid a Crisis. *The New York Times*. Retrieved from <http://www.nytimes.com/2013/07/02/world/europe/croatia-joins-european-union.html>
- [6] Blaxland, J. (2017). *After 50 years, is ASEAN retiring or just getting started?*. *East Asia Forum*. Retrieved 27 August 2017, from <http://www.eastasiaforum.org/2017/08/04/at-50-years-old-is-asean-retiring-or-just-getting-started/>
- [7] Boffey, D. (2017). Rising Euroscepticism 'poses existential threat to EU'. *The Guardian*. Retrieved from <https://www.theguardian.com/politics/2017/mar/03/brexit-has-put-other-leaders-off-wanting-to-leave-says-ec-vice-president>
- [8] Burchill, S. (2001). Liberalism. In S. Burchill, R. Devetak, A. Linklater, M. Paterson, C. Reus-Smit & J. True, *Theories of International Relations* (2nd ed.). Houndmills, Basingstoke, Hampshire: Palgrave.
- [9] Buzan, B. (2016). *People, States and Fear: An agenda for International Security Studies in the Post-Cold War Era*. Colchester: ECPR Press.
- [10] Cole, K., Lyons, R., & Cary, D. (1999). Regional Economic Integration. *The Review: A Journal Of Undergraduate Student Research*, 2(14).
- [11] Drysdale, P., Armstrong, S., Ascione, B., Manuel, R., & Mowbray-Tsutsumi, J. (2016). *Asia and the next financial crisis*. *East Asia Forum*. Retrieved 31 August 2017, from <http://www.eastasiaforum.org/2016/02/22/asia-and-the-next-financial-crisis/>
- [12] Epatko, L. (2012). *Why Did the European Union Win the Nobel Peace Prize?*. *PBS NewsHour*. Retrieved 31 August 2017, from <http://www.pbs.org/newshour/rundown/european-union/>
- [13] Friedman, G. (2010). *The Next 100 Years: A Forecast for the 21st Century*. London: Allison & Busby.

- [14] Fujita, M. (2007). *Globalization, Regional Integration and Spatial Economics: An Introduction*. In M. Fujita, *Regional Integration in East Asia: From the Viewpoint of Spatial Economics*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- [15] Goldstein, J., & Pevehouse, J. (2009). *International Relations* (8th ed.). Noida: Pearson Education Inc.
- [16] Gupta, S. (2015). *Modi can lead South Asia's regional and global integration*. *East Asia Forum*. Retrieved 5 September 2017, from <http://www.eastasiaforum.org/2015/07/06/modi-can-lead-south-asias-regional-and-global-integration/>
- [17] Haggard, S. (1995). *Developing nations and the politics of global integration*. Washington, D.C.: Brookings Institution.
- [18] Iqbal, N., & Nawaj, S. (2016). *Why has SAFTA failed to boost Pakistan–India trade?*. *East Asia Forum*. Retrieved 3 September 2017, from <http://www.eastasiaforum.org/2016/03/19/why-has-safta-failed-to-boost-pakistan-india-trade/>
- [19] Jackson, R., & Sørensen, G. (1999). *Introduction to international relations*. New York: Oxford University Press.
- [20] Maini, T. (2016). *India–Bangladesh economic ties gain momentum*. *East Asia Forum*. Retrieved 3 September 2017, from <http://www.eastasiaforum.org/2016/03/18/india-bangladesh-economic-ties-gain-momentum/>
- [21] Mason, D. (2011). *A Concise History of Modern Europe* (2nd ed.). Plymouth: Rowman & Littlefield Publishers, Inc.
- [22] McKay, J., Armengol, M., & Pineau, G. (2005). *Regional economic integration in a global framework*. Frankfurt am Main: European Central Bank.
- [23] Menon, J., & Melendez, A. (2017). *(Re)realising the ASEAN Economic Community*. *East Asia Forum*. Retrieved 5 August 2017, from <http://www.eastasiaforum.org/2017/08/24/rerealising-the-asean-economic-community/>
- [24] Mingst, K. (2001). *Essentials of international relations* (2nd ed.). New York, Ny: W.W. Norton & Company, Inc.
- [25] Mitrany, D. (1946). *A Working Peace System*. London: Royal Institute of International Affairs.
- [26] Moon, B. (1998). *Controversies in International Trade*. In M. Snarr & D. Snarr, *Introducing Global Issues*. Boulder, Colorado: Lynne Rienner Publishers, Inc.
- [27] Mowat, L. (2016). It will happen in seven years: Turkey believes it will join the EU by 2023. *Express*. Retrieved from <http://www.express.co.uk/news/world/702009/Turkey-join-European-Union-2023>
- [28] Nougayrède, N. (2017). Britain is leaving the EU – just as Europe is on the up. *The Guardian*. Retrieved from <https://www.theguardian.com/commentisfree/2017/jun/18/brexit-europe-golden-decade-merkel-macron>
- [29] Nye, J., & Welch, D. (2015). *Understanding Global Conflict and Cooperation: An Introduction to Theory and History* (9th ed.). Noida: Pearson India Education Services Pvt. Ltd.
- [30] Park, S. (2016). *India's jumbled trade policy*. *East Asia Forum*. Retrieved 3 September 2017, from <http://www.eastasiaforum.org/2016/01/30/indias-jumbled-trade-policy/>
- [31] Roy, J., & Domínguez, R. (2005). *The European Union and regional integration: A Comparative Perspective and Lessons for the Americas*. Miami: Jean Monnet Chair, University of Miami, European Commission.
- [32] Simms, B. (2014). *Europe: The Struggle for Supremacy, 1453 to the Present*. London: Penguin Books.
- [33] Steans, J., Pettiford, L., Diez, T., & El-Anis, I. (2010). *An Introduction to International Relations Theory: Perspectives and Themes* (3rd ed.). Harlow, Essex: Pearson Education Limited.
- [34] Tangkitvanich, S., & Rattanakhomfu, S. (2017). *Assessing the ASEAN Economic Community*. *East Asia Forum*. Retrieved 27 August 2017, from <http://www.eastasiaforum.org/2017/03/21/assessing-the-asean-economic-community/>
- [35] Waldmeir, P., & Donnan, S. (2017). Donald Trump signs 'Buy American, Hire American' order. *Financial Times*. Retrieved from <https://www.ft.com/content/fa3f6cc4-246e-11e7-8691-d5f7e0cd0a16>
- [36] Willetts, D. (2017). HERE COME THE BIG GUNS: British tanks and heavy artillery arrive in Estonia to ward off Russian aggression. *The Sun*. Retrieved from <https://www.thesun.co.uk/news/3156323/british-tanks-and-heavy-artillery-arrive-in-estonia-to-ward-off-russian-aggression/>
- [37] Zaman, R. (2017). *Can Bangladesh turn its burdensome geography into a blessing?*. *East Asia Forum*. Retrieved 1 September 2017, from <http://www.eastasiaforum.org/2017/09/01/can-bangladesh-turn-its-burdensome-geography-into-a-blessing/>

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## An Exploratory Analysis on Entrepreneurial Culture and Financial Education Between Students of the Veracruzana University, Veracruz Region

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Universidad Veracruzana, Mexico

### Abstract

Entrepreneurial culture and financial education have become two of the most relevant issues on the international agenda, since they are considered as elements in favor of the efficient use of financial resources, as well as they are important for the identification of opportunities which favor the development of self-employment projects, contributing to local economic growth. Nevertheless, Mexican financial authorities note that there is an environment with gaps and deficiencies in terms of financial education, which is more evident among the rural population and sectors of lower education and socioeconomic level, causing inefficient use of resources and a poor culture of financial management, which undoubtedly compromises the stability of most Mexican families. In addition, this lack of financial education has a negative impact on the development of entrepreneurial projects, generating greater economic and social problems, taking into account that entrepreneurship is a mechanism that contributes to the creation of jobs and encourages economic growth. Based on these premises, this study aims to identify the level of entrepreneurial culture and financial education among Universidad Veracruzana students, through a descriptive and exploratory analysis; results shown a high level of entrepreneurial culture and a medium level of financial education but a weak positive correlation among them.

**Keywords:** entrepreneurial culture; financial education; Latin America university context.

### Introduction

According to the OECD (2010), entrepreneurs are participants of particular relevance in innovation; as they help turn ideas into practical applications. In the United States, in 2007, companies under the age of five accounted for almost three-quarters of new net jobs. Successful business creation often comes with practice; hence the importance of experimentation, the entry and exit of the market. However, only a small part of the population receives education for the creation of companies. Education and training policies should help foster an entrepreneurial culture to instill the skills and attitudes necessary for a creative drive.

Among main topics for policy makers, financial education takes an important spot due to its impact among small business and entrepreneurs. This is why international organizations such as OECD, World Bank and International Monetary Fund have developed strategies to increase the levels of financial skills among developed countries, emerging economies and less developed regions. Then, entrepreneurial culture and financial education stand out as two fundamental issues on the international agenda, since elements are considered in favor of the efficient use of financial resources, as well as the identification of opportunities for the development of self-employment projects, contributing to local economic growth.

According to the National Commission for the Protection and Defense of Financial Services Users (CONDUSEF, 2012), financial education can be defined as the set of actions that imply learning to manage money better, being foresighted, consuming in a rational way, and learn to invest, know how to take care of your assets and use financial products and services with responsibility.

Similarly, Smyth (2011) points out that financial education is the process by which consumers improve the understanding of financial products and acquire a greater understanding of financial risks and market opportunities, by making economic decisions with information. In addition, he points out that an important part of our decisions is associated with financial behavior, which directly impacts his personal and family environment, from the search for funding for studies to planning

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for retirement. Thus, having an adequate financial education will favor an intelligent selection of financial products, based on well-informed decisions.

The benefits of having an adequate financial education also extend to the national economic level, since, as BBVA (2015) points out, greater economic and financial education helps explain the level of financial development in the country, and which ultimately leads to lower inequality. In this way, having policies in charge of promoting these issues would contribute to reducing inequality by allowing large groups of the population of a country to access the financial markets to monetize their savings. This can also favor an improvement and development of the domestic financial market and consequently contribute to economic growth.

However, the picture of financial education in Mexico is unfavorable, since as mentioned by BANAMEX & UNAM (2008) in the results of the First Survey on Financial Culture in Mexico, there is, in the majority of the population, a medium- or long-term vision in matters related to finances. In addition, this work identified an incipient "control and expenditure planning" culture. This is because, overall, about one in five households had a record of expenditures or planned income, debt and household savings.

In this sense, it is observed that in Mexico there is an environment with gaps and gaps in terms of financial culture, both training and information, which becomes more evident among the rural population and sectors of lower education and socioeconomic level, causing serious consequences, such as the absence of planning in the control of expenses, income and debt, lack of savings and a culture of foresight, which undoubtedly compromises the stability of most Mexican families.

In addition to this, this lack of financial education has repercussions in the area of business, and especially among the projects of micro, small and medium enterprises (MSMEs) and entrepreneurs, which, according to Carton, Hofer & Meeks (1998) are those people with the ability to identify market opportunities to create companies and thus generate value. Recently, the World Bank (2015a) stated that, until very recently, the motivation to become an entrepreneur was to earn a lot of money to have a relaxed life and full of amenities. But lately a new generation of entrepreneurs has emerged who, in addition to modern and profitable ideas, incorporate social and environmental benefits into their business plans.

This is evident since, as Lederman et al (2014) mention that there is a large gap between the capacity to access financing between large companies and the rest, with larger ones being widely favored. This difficulty faced by MSMEs to raise capital also implies greater demands on their use, which undoubtedly requires an adequate level of financial education. In addition, Lederman et al (2014) point out that it is possible that this barrier of access to financing that new companies experience is negatively affecting the entrepreneurial potential of Latin America and the Caribbean.

Considering the negative effect that credit scarcity produces on entrepreneurship, Cai (2015) states that during last years some financial institutions in African countries have developed strategies to reduce credit rates in order to promote entrepreneurial projects; for example, the Chase Bank of Kenya managed to reduce the interest rate paid by women's companies and works to exponentially increase the size of the loan portfolio for these types of enterprises. All these efforts allow more companies to invest in their businesses with reasonable costs. This creates new jobs and contributes to local economic growth.

In Latin America, the Mexican Federal Government created in 2014 the National Fund for Entrepreneurs which aims to stimulate national, regional and sectoral economic growth, through the promotion of productivity and innovation in micro, small and medium enterprises located in strategic sectors, which promotes a systematic strengthening of entrepreneurship development throughout the national territory, as well as the consolidation of an innovative, dynamic and competitive economy.

Also, Marín (2014) stresses the importance of entrepreneurs have the ability to evidence their knowledge in financial matters, because in this way they can overcome the challenges of the market. Similarly, Di Costanzo (2013) argues that a company that begins operations without basic financial education has a high chance of failure, while those that incorporate good financial practices increase their chances of remaining in the market. Thus, it can be seen that financial education has a great influence on the success of entrepreneurial projects.

Nevertheless, Blasco (2012) mentions that some of the main obstacles for enhancing entrepreneurship are the lack of financial resources or the restrictions to access to credit markets, public policies and a low entrepreneurial skills.

Once the importance of the topics of financial education and entrepreneurship in the national and international agencies has been identified, the need arises to identify one of the main spaces where strategies can be designed and implemented in favor of these topics: the University. This, as mentioned by Neck (2014), education is an essential factor to start a business, and therefore the university gives the student the space where he can practice the venture, and at the same time can learn how to deal and manage the uncertainty of the market, which is part of the world of entrepreneurship.

Thus, universities have a fundamental role in the process of training competent individuals to face the demands of an increasingly competitive labor market, in which they will have to make use of financial tools and entrepreneurial skills. However, Lopez (2010) emphasizes the fact that the level of schooling is not directly related to the degree of financial education of individuals.

Based on the above, there is interest in identifying the level of financial education and how widespread is the entrepreneurial culture among university students in our country. However, given the large potential population to be addressed during this work, we intend to limit our scope to the context of Veracruz (southern Mexican federal entity), in which, the Veracruzana University represents the main house of studies given its presence and coverage in twenty-eight municipalities distributed in five regions: Xalapa, Veracruz, Orizaba-Córdoba, Poza Rica-Tuxpan and Coatzacoalcos-Minatitlán. Within these, the second largest number of students is the Veracruz region, which is limited in our immediate area of study.

Given these premises, the following research question is proposed that will lead to the development of this project: what is the level of financial education and entrepreneurial culture among the students of the Veracruz University, Veracruz region? Next, we present a series of arguments that validate the relevance of this work.

### **Justification**

The close relationship that exists between the level of financial education and the level of success of entrepreneurial projects is very important since they affect the pattern of economic growth in emerging economies. It is for this reason that the Inter-American Development Bank (IDB, 2014) has emphasized among senior officials of ministries and agencies of Science, Technology and Innovation of Latin America and the Caribbean the need to discuss public policies that promote entrepreneurship. In addition, this institution continues to promote the dissemination of financial education programs, since these have a fundamental impact on the well-being of citizens (IDB, 2015). Similarly, the World Bank (2013) notes that the relationship between productivity and economic growth has meant that governments and multilateral agencies in recent years have given more attention and support to entrepreneurship: that is, the ability to turn ideas into products and services. For example, the Mexican government has made legal reforms to encourage entrepreneurship and recently created the National Institute of Entrepreneurs (INADEM) to promote the culture and productivity of entrepreneurs and ease credit access through programs such as "Young Credit" which is designed for different profiles of young entrepreneurs with solid business projects (CONDUSEF, 2015).

As pointed recently, these efforts lie on the widely accepted premise that closely links business to economic growth and productivity (Lupiáñez, Priede and López-Cózar, 2014). In this sense, they emphasize that the business aggregate and the creation of new units represent the engine of the economy of the industrialized countries (García, Martínez & Fernández (2010) and Galindo & Méndez (2011)). Similarly, Álvarez, Giraldo & Martínez (2014) point out that the sum of entrepreneurial projects contribute to social and economic development at local and national level; being the local area where the positive effects are more evident, which translate into an increase in the level of employment and the income of the population.

However, Lupiáñez, Priede & Lopez-Cózar (2014) also emphasize the fact that among the empirical evidence there are no uniform results that allow a strong confirmation of this premise due to results vary depending on the context and the indicators used to quantify this relationship.

In addition, the premise that the lack of financial education has an impact on the development of young entrepreneurs (Singer, 2016) represents another area for further research on this subject, since it is difficult to conclude that lack of access to financing is one of the main constraints to innovation and the development of entrepreneurial projects (Lederman et al, 2014).

Based on the above, the development of this project acquires relevance since, according to CONDUSEF (2013), there is a severe lag in our country in the area of financial education, which is evident since due to the lack of information people do not know the advantages or disadvantages they can get from their use.

Similarly, the National Entrepreneur Observatory (2013) emphasizes that in Mexico, despite the fact that entrepreneurs and MSMEs generate a significant amount of jobs and income for the country, they suffer from a series of weaknesses; among them, the difficulty to credit access, lack of knowledge on the subject and low productivity. Thus, raised these needs; we recognize the importance of continuing and contributing to the analysis with concrete proposals on these issues, since they represent areas of opportunity for economic growth and social development in our country.

In addition, these topics will remain strategic on the international agenda, as the World Bank (2015b) states that entrepreneurship and financial culture represent two of the major development tools. Added to this, in the context of the State of Veracruz, Mexico, there is little to no research regarding the level of financial education and entrepreneurial culture, jointly, among university students, which gives greater relevance to this work.

### Objectives

The general objective of this study is to identify the level of entrepreneurial culture and financial education among university students of the different areas of knowledge of the Veracruzana University, Veracruz region. Also, two specific objectives are set: Detect the competencies of university students related to the areas of financial education and entrepreneurship and develop a series of proposals to meet the identified needs, as well as strengthen the strengths in these areas.

In this way, it is intended that this work represents an academic reference for the study of financial education and entrepreneurial culture, which in turn can be reproduced in the national and international context in public and private educational institutions, fulfilling one of the main goals among universities: the generation and dissemination of knowledge to generate social development.

### Literature review

Some recent studies among entrepreneurial culture and financial education which are considered for the development of this study are shown in Table 1:

**Table 1: Literature review**

Author(s)	Main findings
Oseifuah, E. (2010).	This study considers South African young entrepreneurs; financial literacy seems to contribute in developing better entrepreneurial capacities.
Bae, T. et al (2014).	Results shown that there is a positive but weak correlation among entrepreneurial education and entrepreneurial intentions.
Njoroge, R. (2013).	The study, focused in the Kenian context, reports a positive relationship between financial literacy and entrepreneurial skills.
Musie, L. (2015).	There is a positive relationship between financial literacy levels shown by owners and small business performance in Africa; entrepreneurs with higher financial education levels reported greater business profits and higher labor demand.
Lusimbo, E. (2016).	Micro and small business owners with low financial literacy levels shown less efficient performance and lower profit growing rates.
Abubakar, H. (2015).	Study shows that there is a strong relationship between financial literacy and small business performance in Africa; lack of credit access or market constrains represent some of main obstacles to promote entrepreneurship in that continent.
Leifels, A. & Metzger, G. (2015).	Focused on the German context, this study states that lower financial literacy drives to entrepreneurial potential reduction. Nevertheless, coaching and training programs contribute to reduce this problem.
Ćumurović, A. & Hyll, W. (2017).	Financial literacy is an effective mechanism for enhancing entrepreneurial activities.

Source: prepared by the author using documents cited above.

### Hypothesis

After literature review, a set of hypothesis were established to contrast this study results with research in this field developed by authors mentioned in Table 1; these are:

Hypothesis of work (H0): There is a low level of entrepreneurial culture and financial education among the students of the Veracruzana University, Veracruz region, which is reflected in the lack of knowledge of these concepts, as well as in their inability to make correct decisions associated with access and use of financial resources.

Null hypothesis (H1): There is a high level of entrepreneurial culture and financial education among students at the Veracruzana University, Veracruz region, which is reflected in the identification of these concepts, as well as their ability to make correct decisions associated with access and use of financial resources.

Alternative hypothesis 1 (H2): There is a high level of entrepreneurial culture and a low level of financial education among the students of the Veracruzana University, Veracruz region, which is reflected in the identification of concepts related to entrepreneurship, as well as in their inability to make correct decisions associated with access to and use of financial resources.

Alternative hypothesis 2 (H3): There is a low level of entrepreneurial culture and a high level of financial education among the students of the Veracruzana University, Veracruz region, which reflects their inability to identify concepts related to entrepreneurship, as well as in their ability to make correct decisions associated with access and use of financial resources.

Alternative Hypothesis 3 (H4): There is a high level of entrepreneurial culture and an average level of financial education among the students of the Veracruzana University, Veracruz region, which is reflected in a satisfactory level to identify concepts related to entrepreneurship as well as an intermediate capacity to make correct decisions associated with access and use of financial resources.

Alternative Hypothesis 4 (H5): There is an average level of entrepreneurial culture and a high level of financial education among the students of the Veracruzana University, Veracruz region, which is reflected in an average level to identify concepts related to entrepreneurship, as well as high ability to make correct decisions associated with access and use of financial resources.

## Methodology

### Type of study

This work is based on the development of an exploratory, non-experimental and cross-sectional research. This, since it is intended to identify the level of entrepreneurial culture and financial education among the population under study; In addition, this work is non-experimental since the variables involved in its development are not manipulated, and of a cross-sectional type since the data will be collected in a single moment.

Regarding the characteristics of the information expected to be obtained and the techniques for its processing and subsequent interpretation, this study is considered to be of a quantitative and descriptive type.

### Study limitations

As an exploratory and descriptive study, this research does not pretend to develop a comparative analysis among five Universidad Veracruzana Regions or other universities (public or private). Also, the characteristics of data do not provide enough information to perform deep statistical analysis. Nevertheless, these limitations are considered as opportunities for further studies which could enrich research in this area.

### Population and sample

In terms of population, the universe is represented by the total number of students at the Veracruz University (UV) Veracruz region. In this sense, the latest online report issued by the Directorate of Institutional Planning of the UV for the 2015-2016 cycle, yields a total of 11, 181 undergraduate students distributed in thirty educational programs.

To determine the sample size, we adopt the procedure indicated by Aguilar (2005), which uses the following formula:

$$n = \frac{NZ^2PQ}{d^2(N-1) + Z^2PQ}$$

Where:

$N$  = population 11, 881

$n$  = sample

$d$  = error allowed (0.05)

$Z$  = reliability level (1.96)

$p$  = probability of the event in favor (0.5)

$q$  = probability of the event against (0.5)

Once the formula was applied, a sample of 373 students was obtained; these were distributed based on the total enrollment for each of the thirty educational programs that make up the regional offer (check Annex 1). To round up sample size it was decided to increase the number of students up to 388. As inclusion criteria, only students with more than half of credit progress were considered, due to by that point they must have passed some courses which involved topics that promote financial education and entrepreneurial skills; new entry students were not surveyed as part of this research; open education system programs (which are given on an intensive basis during weekends) were not considered. Then, programs were grouped into five academic areas, which are shown in Table 2:

**Table 2: Programs by academic area**

Academic Area	Programs	Students (from total sample)
Administrative Economic	5	89
Health Sciences	8	94
Humanities	2	57
Technical	13	123
Biological Agropecuary	2	25
Total	30	388

Source: prepared by the author using data taken from Direction of Institutional Planning of Universidad Veracruzana, available at [http://www.uv.mx/informacion-estadistica/files/2014/01/Series-Historicas-15\\_16.pdf](http://www.uv.mx/informacion-estadistica/files/2014/01/Series-Historicas-15_16.pdf)

### Research instrument

The field study lied on the application of a survey composed by 52 items divided in two sections; the first part of the instrument was designed to measure the level of entrepreneurial culture among students and items were based on Tiftik (2014) and Yılmaz & Sünbül (2008), cited in Tiftik (2014); it is important to note that items considered from both cited studies were translated from the English to Spanish and some expressions had to be adapted to make them more appropriated for the Mexican context. The second part of the instrument was design to measure the financial education level and was constructed considering the work presented by Atkinson & Messy (2012).

### Analysis of results

Beginning with the analysis of the items focused on measuring the entrepreneurial culture among university students, most of them showed results at the high level, representing 54.12% of the total; if you add those located in the category "very high", the percentage increases to 65.46%. On the other hand, it is important to note that 2.84% of the respondents were at a "low" level and 0.26% at a "very low" level. However, it is significant that 31.44% of the sample showed a "medium" level (Table 3).

**Table 3: Entrepreneurial culture- total results**

Entrepreneurial culture		
Level	Total	%
Very High	44	11.34%
High	210	54.12%
Medium	122	31.44%
Low	11	2.84%

Very low	1	0.26%
Total	388	100.00%

According to results shown in Table 3, it is relevant that only 3.1% of students were located on the lowest levels and most of them showed important elements that reflect an entrepreneurial profile. Also, if students are grouped into three categories (high, medium and low), evidence in favor of the good state of entrepreneurial culture are even more robust. This is represented in Chart 1.

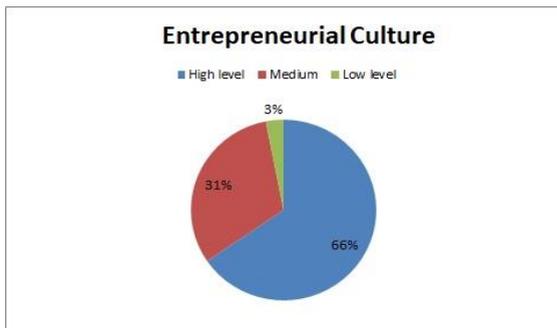


Chart 1: Entrepreneurial culture

In relation to the level of financial education, different findings were found, since 27.32% showed a "low" level and 5.15% "very low", representing 32.47% of the total; On the other hand, 47.43% were in the "medium" category, 18.81% in the "high" category and only 1.29% were "very high" (Table 4).

**Table 4: Financial education: total results**

Financial education		
Level	Total	%
Very High	5	1.29%
High	73	18.81%
Medium	184	47.42%
Low	106	27.32%
Very low	20	5.15%
Total	388	100.00%

As done with entrepreneurial culture, results were grouped into three categories and it led us to a very different scenario among topics covered by the instrument; financial education clearly reported lower levels than those related to entrepreneurial culture, as shown in Chart 2.

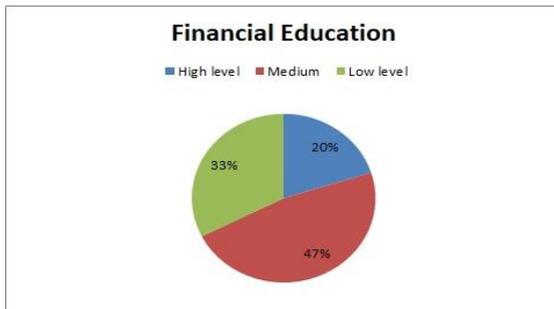


Chart 2. Financial education

It is important to note that just one student showed a "very low" level of entrepreneurial culture but when it came to financial education the sum in that category went up to twenty. Also, items in this topic were split into three areas: knowledge (items 1 to 9), behavior (items 10 to 15) and attitude (items 16 to 18); among these, behavior got the best scores (68%), followed by knowledge (56%) and attitude (45%). Next, the Table 5 shows both aspects addressed in the instrument, so that they can be compared more easily.

**Table 5: Compared results among topics**

Entrepreneurial culture			Financial education	
Level	TOTAL	%	TOTAL	%
Very High	44	11.34%	5	1.29%
High	210	54.12%	73	18.81%
Medium	122	31.44%	184	47.42%
Low	11	2.84%	106	27.32%
Very Low	1	0.26%	20	5.15%
Total	388	100.00%	388	100.00%

Based on Table 5, it can be stated that there is a medium-high trend in the levels of entrepreneurial culture, while it is medium-low in financial education; a deeper analysis from general descriptive statistics reported that entrepreneurial culture items had lower standard deviation compared to those focused on entrepreneurial culture which is congruent with these findings (check Annex 2). Next, Table 6 compares the results by academic area:

**Table 6: Results by academic area**

Academic Area	Administrative Economic		Technical		Humanities		Health Sciences		Biological Agropecuary	
	E.C.	F.E.	E.C.	F.E.	E.C.	F.E.	E.C.	F.E.	E.C.	F.E.
Very High	14.61%	1.12%	17.02%	2.13%	3.51%	0.00%	8.94%	1.63%	8.00%	0.00%
High	55.06%	14.61%	54.26%	10.64%	59.65%	14.04%	49.59%	26.02%	60.00%	40.00%
Medium	28.09%	60.67%	27.66%	64.89%	29.82%	36.84%	37.40%	34.96%	32.00%	20.00%
Low	2.25%	23.60%	1.06%	20.21%	5.26%	35.09%	4.07%	29.27%	0.00%	40.00%
Very Low	0.00%	0.00%	0.00%	2.13%	1.75%	14.04%	0.00%	8.13%	0.00%	0.00%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: prepared by author. E.C.:Entrepreneurial Culture; F.E.: Financial Education.

Considering results provided in Table 6, it is clear that only the Biological Agropecuary academic area got students with both high entrepreneurial culture and financial education levels; nevertheless, also a high portion of surveyed obtained low

financial education levels, so it is not possible to identify a really different scenario. Also, it is observed that students from Humanities area got the lowest scores in both dimensions.

As part from data analysis, a correlation test was performed and it was found that there is a positive but insignificant relationship between entrepreneurial culture and financial education levels among students; these results are provided in Table 7.

**Table 7: Correlation analysis**

	Financial education	Entrepreneurial culture
Financial education	1	
Entrepreneurial culture	0.12017762	1

### Discussion of results

After analyzing the data obtained from the application of the research instrument, it is observed that the results of this work resemble those presented by Bae et al (2014), considering the positive but weak relationship found among entrepreneurial skills and financial education levels shown by students; also, it could be said that this study sets the first steps to a path to identify if, in our context, financial education leads to higher financial education levels, which could let us to results similar to Njoroge (2013) and Musie (2015). If students surveyed in this research are followed after starting an entrepreneurial project, a further study could provide valuable information to validate the premises set by Lusimbo (2016) and Leifels & Metzger (2015).

### Conclusion and recommendations

Definitely, the relationship between variables selected for this study is one of the most important issues in the international agenda, considering the labor market hardness and scarcity of financial products for micro and smalls enterprises; in the context of Universidad Veracruzana, Veracruz Region, students shown a positive trend in terms of entrepreneurial skills, taking into consideration that more than half of them reported high or very high levels; though, when it came to financial education results were less optimistic due to more than half of subjects were located from medium to very low levels; in general terms, it can be said that students in this region present a high level of entrepreneurial skills and a medium level of financial education.

Then, it can be stated that both work hypothesis and null hypothesis are rejected and alternative hypothesis 3 is accepted. Future studies in this context could lead to identify which factors are enhancing entrepreneurial skills and limiting financial education among students from different areas, considering that a higher level of financial behavior was found among surveyed.

Based on the above, it is suggested that Universidad Veracruzana develop programs focused on materializing entrepreneurial potential into micro and small business, through coaching strategies and technical support to design robust business plans. Then, it will be highly recommended to follow these entrepreneurial projects to identify how these evolve through time, gaining valuable information that could help future entrepreneurs. Also, it is desirable to increase extracurricular activities like workshops or webinars aimed to disseminate the benefits of good practice in financial education.

Finally, it is important to mention that this research marks the path for a series of studies focused in explaining the relationship between entrepreneurial culture and financial skills in the context of Southern Mexico, helping researchers to define better strategies that could turn into public policies related to these topics.

### References

- [1] Abubakar, H. (2015). Entrepreneurship development and financial literacy in Africa. *World Journal of Entrepreneurship, Management and Sustainable Development*. Vol. 11 Issue 4, pp. 281-294. Available at <http://www.emeraldinsight.com/doi/abs/10.1108/WJEMSD-04-2015-0020?journalCode=wjemdsd>
- [2] Aguilar, S. (2005). Fórmulas para el cálculo de la muestra en investigaciones de salud. *Salud en Tabasco*, vol. 11, núm. 1-2, enero-agosto, pp. 333-338. Secretaría de Salud del Estado de Tabasco. Villahermosa, México.

- [3] Álvarez, A., Giraldo, O. & Martínez, B. (2014). Emprendimiento, factor clave para el crecimiento económico. Algunos elementos de casos en Colombia y otros estudios. Escenarios: empresa y territorio, ND, 1-16.
- [4] Atkinson, A. & Messy, F. (2012). Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions. No. 15, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5k9cfs90fr4-en>
- [5] Bae, T., Qian, S. Miao, C. & Fiet, J. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review. *Entrepreneurship, theory and practice*. March 2014. Available at [https://www.researchgate.net/publication/260532516\\_The\\_Relationship\\_Between\\_Entrepreneurship\\_Education\\_and\\_Entrepreneurial\\_Intentions\\_A\\_Meta-Analytic\\_Review](https://www.researchgate.net/publication/260532516_The_Relationship_Between_Entrepreneurship_Education_and_Entrepreneurial_Intentions_A_Meta-Analytic_Review)
- [6] BANAMEX & UNAM. (2008). Primera Encuesta sobre Cultura Financiera en México. (1, 1-36), México, D.F.: Educación Financiera BANAMEX.
- [7] BBVA. (2015). Una educación financiera y económica global ayuda a reducir la desigualdad de un país. 17 de febrero de 2016, de BBVA Available at: <https://info.bbva.com/es/noticias/economia/consumo/una-educacion-financiera-y-economica-global-ayuda-a-reducir-la-desigualdad-de-un-pais/>
- [8] Blasco, N. (2012). Educación financiera y espíritu emprendedor de los jóvenes en Aragón. *Economistas*, Colegio de Aragón. Universidad de Zaragoza. Available at [http://ecoara.org/uploads/documentos/documentos\\_DOCUMENTO\\_SINTESIS\\_4c37629c.pdf](http://ecoara.org/uploads/documentos/documentos_DOCUMENTO_SINTESIS_4c37629c.pdf)
- [9] Cai, J. (2015). El apoyo a las emprendedoras es una inversión clave para promover el desarrollo mundial. *Voces, perspectivas para el desarrollo*. Banco Mundial. Available at <https://blogs.worldbank.org/voices/es/el-apoyo-las-emprendedoras-es-una-inversion-clave-para-promover-el-desarrollo-mundial>
- [10] Carton, R., Hofer, C., & Meeks, M. (1998). The entrepreneur and entrepreneurship: Operational definitions of their role in society. Annual International Council for Small Business Conference, Singapur.
- [11] CONDUSEF. (2012). La educación financiera es para ti. 20 de febrero de 2016, de CONDUSEF. Available at: <http://www.condusef.gob.mx/Revista/index.php/usuario-inteligente/277-la-educacion-financiera-es-para-ti>
- [12] CONDUSEF. (2013). Educación financiera, la clave. 20 de febrero de 2016, de CONDUSEF. Available at: <http://www.condusef.gob.mx/Revista/PDF-s/2013/162/entrevistas.pdf>
- [13] CONDUSEF. (2015). Crédito joven: el apoyo para pasar de la idea a la acción. Available at: <http://www.condusef.gob.mx/Revista/PDF-s/2015/182/inadem.pdf>
- [14] Čumurović, A. & Hyll, W. (2017). Financial literacy and self-employment. Global Financial Literacy Excellence Center. Available at <http://gflec.org/wp-content/uploads/2017/04/CUMUROVIC-Paper-Cherry-Blossom-2017.pdf?x28148>
- [15] Di Costanzo, M. (2013). Educación financiera, clave para supervivencia de Pymes. 20 de febrero de 2016, de Forbes México. Available at: <http://www.forbes.com.mx/condusef-dara-impulso-a-mipymes-y-emprendedores/>
- [16] Galindo, M. & Méndez, M.. (2011). Innovación y crecimiento económico: factores que estimulan la innovación. *Cuadernos de gestión*, 12, 51-58.
- [17] García, C., Martínez, A. & Fernández, R. (2010). Características del emprendedor influyentes en el proceso de creación empresarial y el éxito esperado. *Revista Europea de Dirección y Economía de la Empresa*, 19, 31-48.
- [18] Inter-American Development Bank. (2014). BID y autoridades analizan políticas para impulsar el emprendimiento en la región. 21 de febrero de 2016, de Banco Interamericano de Desarrollo. Available at: <http://www.iadb.org/es/temas/competitividad-tecnologia-e-innovacion/bid-y-autoridades-analizan-politicas-para-impulsar-el-emprendimiento-en-la-region,18237.html>
- [19] Inter-American Development Bank. (2015). BID aprueba US\$300 millones para seguridad social y eficiencia del gasto en salud de República Dominicana. 20 de febrero de 2016, de BID. Available at: <http://www.iadb.org/es/noticias/comunicados-de-prensa/2015-11-19/republica-dominicana-seguridad-social-y-salud,11327.html>
- [20] Kojo, E. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, Vol. 1 Iss: 2, pp.164 - 182
- [21] Lederman, D., Messina, J., Pienknagura, S. & Rigolini, J. (2014). El Emprendimiento en América Latina: muchas empresas y poca innovación. Washington, Estados Unidos de América: Banco Mundial.
- [22] Leifels, A. & Metzger, G. (2015). Financial literacy helps with business start-ups: easier, better funded, more competitive. *KWF Reseach*. No. 107, 6th October. Available at <https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Fokus-Volkswirtschaft/Fokus-englische-Dateien/Fokus-Nr.-107-Oktober-2015-Financial-literacy.pdf>
- [23] López, P. (2010). Educación financiera, cuestión de sentido común en las personas. 19 de febrero de 2016, de El Economista. Available at: Educación financiera, cuestión de sentido común en las personas
- [24] Lupiáñez, L., Priede, T., & López-Cózar, C. . (2014). El emprendimiento como motor del crecimiento económico. *Boletín Económico de ICE*, 3048, 55-63.
- [25] Lusimbo, E. (2016). Relationship between financial literacy and growth of micro and small enterprises in Kenya: A case of Kakamenga Central sub-county. Jomo Kenyatta University of Agriculture and Technology. Available at <http://ir.jkuat.ac.ke/bitstream/handle/123456789/2236/Lusimbo%2C%20Nekesa%20%20MSc.%20%20Entrepreneurship%2C.%20202016..pdf?sequence=1&isAllowed=y>
- [26] Marín, M. (2014). Educación financiera base del éxito de emprendedores. 18 de febrero de 2016, de El Economista. Available at: <http://eleconomista.com.mx/sistema-financiero/2014/05/13/educacion-financiera-base-exito-emprendedores>

- [27] Musie, L. (2015). The use of financial literacy concepts by entrepreneurs in the small and medium enterprise sector in Mpumalanga Province, South Africa. Gordon Institute of Business Science. University of Pretoria. Available at [https://repository.up.ac.za/bitstream/handle/2263/52268/Musie\\_Use\\_2016.pdf?sequence=1&isAllowed=y](https://repository.up.ac.za/bitstream/handle/2263/52268/Musie_Use_2016.pdf?sequence=1&isAllowed=y)
- [28] National Entrepreneur Observatory. (2013). Análisis transversal del gasto en políticas de apoyo a los emprendedores, MiPYMES. 20 de febrero de 2016, de Instituto Nacional del Emprendedor. Available at: <http://www.mx.undp.org/content/dam/mexico/docs/Publicaciones/PublicacionesReduccionPobreza/one/AnalisistransversaldelgastoenpoliticasdeapoyoaaemprendedoresyMiPYMEs.pdf>
- [29] Neck, H. (2014). La educación es importante para iniciar un negocio: Heidi Neck. 18 de febrero de 2016, de Innovación UNAM. Available at: [http://www.innovacion.unam.mx/entrevista\\_3.html](http://www.innovacion.unam.mx/entrevista_3.html)
- [30] Njoroge, R. (2013). Relationship between financial literacy and entrepreneurial success in Nairobi County Kenya. Available at <http://chss.uonbi.ac.ke/sites/default/files/chss/NJOROGE%20ROBERT-D61-75875-2012.pdf>
- [31] OECD. (2010). Multilingual Summaries. The OECD Innovation Strategy: Getting a head start on tomorrow. Available at: <https://www.oecd.org/sti/45302715.pdf>
- [32] Oseifuah, E. (2010). Financial Literacy and youth entrepreneurship in South Africa. African Journal of Economic and Management Studies, Vol. 1 Issue 2, pp. 164-182. Available at <http://www.emeraldinsight.com/doi/abs/10.1108/20400701011073473>
- [33] Singer, S. (2016). Falta educación financiera para el desarrollo de jóvenes emprendedores. 21 de febrero de 2016, de El Financiero-Bloomberg. Available at: <http://www.elfinanciero.com.mx/tv/falta-educacion-financiera-para-el-desarrollo-de-jovenes-emprendedores-singer.html>
- [34] Smyth, M. (2011). Educación financiera para todos: estrategias y buenas prácticas de educación financiera en la Unión Europea. 19 de febrero de 2016, de Comité Económico y Social Europeo. Available at: <http://www.eesc.europa.eu/resources/docs/qe-30-12-894-es.pdf>
- [35] Tiftik, H. (2014). A Survey of Entrepreneurial Tendencies Candidate Young Entrepreneurs: Foundation University Sample. Journal of Management Research. Vol. 6, No. 2. ISSN 1941-899X
- [36] World Bank. (2013). Ser emprendedor en México, ¿misión imposible? 19 septiembre 2013. Available at <http://www.bancomundial.org/es/news/feature/2013/09/19/entrepreneurship-innovation-mexico>
- [37] World Bank. (2015a). Los jóvenes emprendedores que miran más allá del dinero. 13 abril 2015. Available at <http://www.bancomundial.org/es/news/feature/2015/04/13/los-jovenes-emprendedores-que-miran-mas-alla-del-dinero>
- [38] World Bank. (2015b). Los empresarios jóvenes, como factores que impulsan el crecimiento sostenible. 20 de febrero de 2016, de Banco Mundial. Available at: <http://envivo.bancomundial.org/empresarios-jovenes-factores-que-impulsan-el-crecimiento-sostenible>
- [39] Yılmaz, E. & Sünbül, A. (2008). Üniversite Öğrencilerine Yönelik Girişimcilik Ölçeğinin Geliştirilmesi. Selcuk University Social Sciences Institute Journal, 21.

### Annex 1: Distribution of the sample through educational programs

Program	Enrolled	Percentage of total	Sample	Final sample
International Agribusiness	112	0.94%	3.52	4
Veterinary Medicine	651	5.48%	20.44	21
Dentist	621	5.23%	19.50	20
Physical Education	434	3.65%	13.63	14
Nursing	590	4.97%	18.52	19
Medicine	931	7.84%	29.23	30
Chiropractic	68	0.57%	2.13	3
Nutrition	529	4.45%	16.61	17
Psychology	446	3.75%	14.00	15
Bioanalysis	628	5.29%	19.72	20
Management	867	7.30%	27.22	28
Tourist Management	451	3.80%	14.16	15
Computer Systems Management	332	2.79%	10.42	11
Accountancy	818	6.88%	25.68	26
Administration and Business Management	277	2.33%	8.70	9
Communication Sciences	631	5.31%	19.81	20
Pedagogy	683	5.75%	21.44	22
Architecture	45	0.38%	1.41	2
Chemical Engineering	313	2.63%	9.83	10
Civil Engineering	728	6.13%	22.86	23

Topographical Engineering	108	0.91%	3.39	4
Engineering in Electronics and Communications	274	2.31%	8.60	9
Electrical Mechanical Engineering	29	0.24%	0.91	1
Naval Engineering	204	1.72%	6.40	7
Metallurgical Engineering of Materials	119	1.00%	3.74	4
Industrial Engineering	164	1.38%	5.15	6
Electrical Engineering	232	1.95%	7.28	8
Mechanical Engineering	284	2.39%	8.92	9
Informatics Engineering	152	1.28%	4.77	5
Mechatronics Engineering	160	1.35%	5.02	6
Total	11881	100.00%	373	388

Source: prepared by the author using data taken from Direction of Institutional Planning of Universidad Veracruzana, available at [http://www.uv.mx/informacion-estadistica/files/2014/01/Series-Historicas-15\\_16.pdf](http://www.uv.mx/informacion-estadistica/files/2014/01/Series-Historicas-15_16.pdf)

## Annex 2: Descriptive statistics

Financial education		Entrepreneurial culture	
Mean	2.83762887	Mean	3.73453608
Typical Error	0.04230771	Typical Error	0.03572656
Median	3	Median	4
Mode	3	Mode	4
Standard deviation	0.8333653	Standard deviation	0.70373169
Sample variance	0.69449772	Sample variance	0.49523829
Kurtosis	-0.1779926	Kurtosis	0.23889786
Skewness coefficient	-0.0916273	Skewness coefficient	-0.2467376
Range	4	Range	4
Minimum	1	Minimum	1
Maximum	5	Maximum	5
Sum	1101	Sum	1449
Count	388	Count	388

Source: prepared by author.

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## Challenging Issues Facing the Professionals of Child Protection in Estonia, Finland, Slovenia and Spain: A Comparative Study

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### Abstract

Child maltreatment is a phenomenon which has a high impact on child health, causing serious disruptions in the development of the child and, in some extreme cases, their death. Thereby, cooperation and coordination among services and professionals is a crucial factor affecting the effective assistance of children who have been victims or witnesses of violence. However, the intervention in cases of child maltreatment is a complex issue that faces specific difficulties in every step of the intervention process which also may depend on each country's features and its protection system. Specifically, this paper is focused on the most challenging issues that different professionals of child protection services, such as social workers, health-care specialists and psychologists among others, face in Estonia, Finland, Slovenia and Spain, with particular emphasis in professional's training needs. A methodological triangulation, combining desk research, focus groups and questionnaires have been used to obtain a broader and deeper perspective of the objective of the study. The analysis developed in this paper has shown that coordination among professionals and system, legal procedures, attitudes, training issues and lack of resources can be understood as the main challenges that professionals have to face. As for professionals' training needs, the results have shown that they were different in each country. This fact might be related to idiosyncratic features and configuration of the child protection systems and the kind of potential users that they have.

**Keywords:** child protection, child maltreatment, professional's challenges, training needs

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## 1. INTRODUCTION

Child maltreatment by definition encompasses various types of abuse, physical, sexual and physiological abuse, as well as neglect and exploitation of children or young people; it is a phenomenon which has a severe impact on the child's health, causing serious disruptions in the development of the child and, in some extreme cases, can lead to death. The intervention process in these cases is a complex issue that can face specific challenges depending on the type of abuse, intervention procedure, characteristics and protection system of a country. As children face difficulties when it comes to reporting violent acts committed against them, the role of professionals working in this field is crucial. Therefore, professionals working on any such case must be able to identify different kinds of child maltreatment and act according to each particular case of abuse and circumstance. In this situation, the cooperation and coordination among services and professionals, as well as their skills, are key factors affecting the prevention and the effective assistance of children who have been victims or have witnessed violence.

Given this premise, the principal aim of this paper is to identify the most challenging issues and difficulties faced by professionals involved in child protection (by professionals we refer to social workers, health-care specialists and psychologists amongst others) in Estonia, Finland, Slovenia and Spain. Specifically, particular attention has been paid to professionals training needs as a key aspect in the process of assisting and supporting children who have fallen victim to violence or who have witnessed violence. To this end, a case study in the above mentioned countries has been developed by combining desk research and existing sources of information in order to determine the training requirements that should be provided to individuals involved in child protection services.

This paper is divided into four main sections. The first section, the "Theoretical Framework" presents a general overview of child maltreatment in the aforementioned countries, with a special attention to the network of professionals and services that assist in situations of child abuse, and the main difficulties they face in each country. The second section "Methodological issues" describes the methodology used in this study. The "Results" section, gathers the main findings obtained in each country regarding professionals training needs. Finally, the last section provides a summary of the main conclusions and ideas reached in this paper.

## 2. THEORETICAL FRAMEWORK

This section analyses and compares the child maltreatment phenomenon among the countries studied, paying special attention to the main available resources when dealing with these cases. Furthermore, this section offers an analysis of the main problems that professionals working in this field have to face.

### 2.1. An overview of child maltreatment in Estonia, Finland, Slovenia and Spain

Child maltreatment is a phenomenon which can severely impact on the child's health, causing serious disruptions in the development of the child and, in some extreme cases, their death. The intervention procedure in these cases is a complex issue due to the fact that the driven factors and prevention strategies differ depending on victim's age, the environment where such violence occurs and the relationship between the victim and the abuser (WHO, 2009). In addition, intervention faces specific difficulties in every step of the process which also may depend on each country's characteristics and protection system.

In tackling this issue, an important first step is to delimitate what we consider to be child maltreatment. Although there are several ways to classify child maltreatment, depending on several variables such as the moment, authors, kind of action and its intensity (Spanish Childhood Observatory, 2006; The Spanish Ministry of Health, Social Services and Equality, 2014), according to WHO (1999) four kinds of child abuse stand out: physical, emotional and psychological, sexual abuse and negligence. Beyond these four types of abuse, a child being witness to domestic violence has also been regarded as abuse, or considered a kind of psychological maltreatment (The Spanish Ministry of Health, Social Policy and Equality, 2011).

Although cases of child abuse can take place in various contexts, many of them occur in the family or within the home, with parents being the main aggressors (Pinheiro, 2006). This fact shows the worrying relevance of violence within the family, which has also been evidenced in the case countries in this study. For example, in Slovenia every year 300 suspicious cases of neglect and abuse are reported to the police together with around 150 cases of sexual assault against a person

under 15 years old. Thus, Slovenian social work centres mainly deal with cases of domestic violence, in which children have suffered neglect or some kind of psychological physical or sexual abuse. In Finland, due to the sociodemographic characteristics of the Finnish population, immigrant minors deserve important attention since they come from a wide range of backgrounds such as immigrant families, refugees, asylum seekers or illegal immigrants. Within this collective, maltreatment is mostly related to domestic violence or related to cultural background under the so-called harmful traditions. In Spain, according to Save the Children (2015), twelve children were killed due to domestic violence from 2013 to 2015. Studies have also shown that fathers are the main aggressors in cases of physical, psychological, and sexual abuse while mothers are the main aggressors in negligence cases (Ministry of Health, Social Services and Equality, 2014).

Despite the alarming prevalence of violence against children within families, it is considered that official statistics might only be the tip of the iceberg as a result of the difficulty in identifying the real number of child maltreatment cases. Beyond limitations such as the scarcity of available data, child maltreatment detection is particularly difficult due to several factors such as fear of reporting abuse, the difficulties that children must overcome when reporting violent acts, and the "social acceptance" of some kind of said violence (Pinheiro, 2006; Save the Children, 2015; Spanish Childhood Observatory, 2006). Along with this, some child maltreatment forms, such as psychological abuse, could be more difficult to detect (Arruabarrena, 2011; Spanish Childhood Observatory, 2006). Consequently, prevention, detection and effective assistance to children who have been victims or witnessed violence requires skilled specialists and the cooperation and coordination among services and professionals working in this field, so that integral attention to these situations can be administrated timely and successfully. The following sections describe the resources available for the protection and prevention of child maltreatment situations in Estonia, Finland, Slovenia and Spain.

## **2.2. Resources available for the protection of children against maltreatment, and difficulties faced by the professionals involved in child protection services**

As mentioned before, coordination and cooperation between professionals as well as services and resources are crucial when it comes to providing an effective integral attention to child maltreatment cases. In this section we describe the main resources available, in the studied countries, to protect children who have been victims of abuse. Special attention has been paid to the most important legal resources available, to the job of professionals working in the child protection field and the coordination among them. Furthermore, this section highlights some of the difficulties encountered in the child protection system by country.

### **2.2.1. Legal framework**

Legal framework constitutes an essential tool in the protection and guarantee of children's rights and helps avoid harmful disruptions to their development. Particularly, during the 20<sup>th</sup> century the protection of children has been a topic considered by public authorities. During this process, an important milestone has been the establishment of the United Nations and the Convention on the Rights of the Child in 1989, inspiring and affecting both national and international legal frameworks in this matter (Alemán, 2014). However, despite the European Union action in protecting children's rights, national legislation in this matter in each country differs, configuring different national systems (Bartolomé, 2013).

In particular, the Slovenian legal framework is trying to build a culture of zero tolerance towards violence against children by prohibiting corporal punishment, at home or by family members. Currently, the Slovenian Criminal Code (KZ-1B, 2011) details criminal offences against the sexual integrity of children including exploitation through prostitution (Article 175) and manufacture, possession and distribution of pornographic material (Article 176). In addition, its last amendment introduced grooming as a crime in Article 173. Besides the Criminal Code (KZ-1B, 2011), the Slovenian legal framework is also made up of some rules adopted by the Slovenian Ministry of Education and Sport and the Slovenian Media Act. Hence, the rules adopted by the Slovenian Ministry of Education and Sport when dealing with domestic violence in the educational field specify ways to assist children who have been victims of abuse, and forms to cooperate with other institutions. In addition, the Slovenian Media Act tries to protect children by requiring that advertisements featuring children should not include scenes of violence, pornography or anything that could damage their health, mental or physical development. In Estonia the last Child Protection Act which entered into force in January, 1<sup>st</sup> 2016 is the main statute for the protection of children nowadays. Specifically, in section 12 of this Act the Government of the Republic is in charge of approving drafts and national strategies and ensuring enough funding. Also the Violence Prevention Strategy 2015-2010 together with the Child Protection Act must achieve set objectives in this area. In Finland, the Act on Child Custody and Right of Access (361/1983)

prohibits oppressing, physically punishing or subjecting a child to any other form of abusive treatment. The Criminal Code of Finland (39/1889) prohibits sexual abuse of and violence against children. The protection of children is defined in the Child Welfare Act (417/2007) and this Act is applied to all children in Finland regardless of their background. Furthermore, this Act establishes the kind of professionals who can work in the child protection field (Article 25) and stresses the duty to report child abuse cases to the police. Specifically, in Finland, municipalities are in charge of child welfare services and social workers are responsible for child welfare in these municipalities. Similarly, in Spain, the Spanish model for child protection is decentralised and organised through the autonomous communities. According to Article 39 of the Spanish Constitution<sup>1</sup>, public powers must provide comprehensive protection to children. As autonomous communities have legal powers to guarantee social assistance, regional governments have developed their own laws on child protection leading to a decentralized structure in the child protection field. Thus, Organic Law 8/2015, 22nd July<sup>2</sup> and Law 26/2015, 28th July<sup>3</sup> modifying the child and adolescent protection system are a reference for the legislative development of the autonomous communities, guaranteeing coordination and a uniform protection over the entire territory. Furthermore, in Spain the national plans such as 2nd Strategic National Plan for Childhood Adolescence (PENIA, 2013-2016) and the Comprehensive Plan for Family Support (PIAF, 2015-2017) constitute a framework of cooperation between administrations and agents, establishing diverse strategic lines to follow, in order to achieve the wellbeing of minors and families.

### **2.2.2. Networking: coordination and cooperation between professionals working with child abuse victims.**

Networking has a large role in the timely and effective assistance of children and their families. Generally speaking, the purpose of the network is to solve everyday problems of the person needing assistance and delimit relationships between certain people or groups. Furthermore, networking can be regarded as an opportunity to work effectively by sharing the available information to help those needing assistance in a less painful manner (Korp & Rääk, 2004). According to Haage (2015), networking is made up of two modalities: the primary and the secondary network. The first one is composed of parents, siblings, relatives, neighbours, and friends whereas the second one consists of various professionals belonging to the network through certain formalized channels.

In particular, the secondary network is especially important when the primary network shrinks back. In other words, when the parents are not able to take care of their children or there is a maltreatment situation, other institutions and professionals have to take part in the process to protect minors (Department of Social Welfare of the Government of Valencia, 2011). On the whole, this secondary network in cases of child maltreatment is made up of professionals belonging to areas such as education, health, social and police services, legal and philanthropic organizations. For example, in Estonia child protection workers, operating in administration of the Social Insurance Board or in local and county governments, play a significant role by performing diverse tasks such as raising awareness in the community, direct work with clients and case management. As mentioned before, in Finland there is a large number of professionals working together to ensure the protection of children. Within the Finnish secondary network, the police service has a crucial role in the detection of cases as, according to Article 25 of Child Welfare Act, professionals and authorities must report any suspicious case of abuse to them. However, child protection workers and social work centres are crucial actors when there is a detected case of child abuse. Similarly, in Slovenia, the secondary network is made up of several professionals and services such as the police, social work centres and centres for children and teenagers, schools, counselling centres for children, teenagers and philanthropic organizations. In particular, among this network, two good practices merit particular attention: the project called "Defender-the voice of a Child" and "TOM telefon". The former consists of a child defender network focused on making sure that children are aware of the most important information concerning their life. The latter, "TOM telefon", provides a helpline to help children and young people on issues such as Internet use, online bullying, sexting and other kinds of online abuse. Likewise, in Spain, professionals from the aforementioned areas are involved in the child protection field in order to provide an integral attention to child abuse situations by playing different roles. Consequently, while the main role of the police, health and education services is more related to the identification of maltreatment cases, social

<sup>1</sup> Constitución Española. Boletín Oficial del Estado, 29 de diciembre de 1978, núm. 311, pp. 29313-29424.

<sup>2</sup> Ley Orgánica 8/2015, de 22 de julio, de modificación del sistema de protección a la infancia y a la adolescencia. Boletín Oficial del Estado, 23 de julio de 2015, núm. 175, pp. 61871-61889.

<sup>3</sup> Ley 26/2015, de 28 de julio, de modificación del sistema de protección a la infancia y a la adolescencia. Boletín Oficial del Estado, 29 de julio de 2015, núm. 180, pp. 64544-64613

services are responsible for evaluating every situation and carrying out actions to improve the child's situation once a case has been detected (Department of Social Welfare of the Government of Valencia, 2010; 2011). In order to coordinate the aforementioned services and professionals, the Spanish Ministry of Health, Social Services and Equality (2014) launched a protocol for action in cases of child maltreatment with the aim of offering general guidelines for the actions that the professionals have to carry out in these cases.

Therefore, the cooperation and coordination of professionals is fundamental since it pinpoints the role of professionals working in these cases by avoiding duplicities in services and improving the effectiveness of the net, offering a multidisciplinary solution to a complex problem. However, the main challenge in child maltreatment cases may be the coordination among professionals and system, reducing the effectiveness of the responses given.

### 2.3. Difficulties faced by the professionals involved in child protection services

As previously mentioned, a case of child maltreatment is a sensitive and complex matter which faces several intrinsic difficulties. In tackling with these cases, professionals have to deal with specific obstacles in every step of the process, together with some difficulties which may depend on the characteristics and legislations of each country's protection system. For example, the impact analysis of the draft Child Protection Act in Estonia and the abused child assistance system highlight the main problems within the Estonian system. First of all, the fact that there is no single organisation responsible for helping abused children in Estonia can be regarded as a factor affecting victims. In this regard, it was noted that victims could end up escaping the notice of different professionals and, consequently, not receiving the right services. In addition, the lack of central coordination and the poor communication among professionals were considered to be limiting, impacting on the potential re-victimization of children who may end up talking about their case to various specialists. Firstly, although supervision was regarded key point in this analysis, it was argued that the supervision system of child protector workers had not been consistently developed, not being available to everyone. Secondly, some challenges detected in Estonia were related to training and professional development. Thus, after Estonia regained its independence in 1990 training and teaching of social workers, also child protector workers began in Tallinn University. While many people acquired the needed education, there were many people that did the job without having the right knowledge and education for this specific job. Estonia still faces some challenges related to training and professional development. There are still child protector workers working in the social work field without having the necessary education for the job and thus, professionals may use different methods and techniques when dealing with child maltreatment cases. A big step forward to change the problem has been made in Estonia. According to Section 19 of the Child Protection Act, which came into force in 2016, a child protection worker should have professional training and higher education. Therefore, child protection workers who do not have the needed education should have it in two years. Together with this, the Estonian certification system, more focused on professional certificates and theoretical knowledge than on experiences and additional training, was considered another limitation, as real cases go further than theoretical knowledge. Thirdly, the shortage of child protection workers was noted as a constraint, making access to services more difficult. As a result, more attention may be paid to consequences rather than prevention in the intervention of child maltreatment cases. Finally, public attitude was considered as an important factor when it comes to reporting abuse cases, affecting the professional's ability to recognize and offer intervention to a possible case of child abuse (Salla, Surva, Ilves, Soo & Reinomägi, 2013). According to the aforementioned analysis, public attitudes are relevant since little attention is paid to supporting parenthood and to returning children to their biological families in the future. Further than these limitations, a study developed by Soo, Ilves and Strömpl (2009) showed that professionals had different awareness of the existence of laws, regulations and other guidelines related to providing assistance to an abused child in Estonia. Similarly, in Slovenia the lack of resources, human, economic or logistic, such as specific programs and training for professionals, seems to be an important issue. In addition, coordination among professionals and lack of recognition of modern forms of aggression as well the difference between law and practice, are considered challenges that professionals working in child protection field face in Slovenia. In this respect, in Finland, some specific difficulties are related to legal procedures and the duty to report child abuse cases to the police. Explicitly, the Child Welfare Act in Article 25 establishes that a wide range of professionals from different fields have the duty to notify the municipal body responsible for social services if they discover a case in which it is necessary to open an investigation to monitor and ensure the welfare of a child. However, more information may be needed among professionals about what cases they are obliged to report. Likewise, in Spain, some professional challenges are linked to the detection of child maltreatment cases. This is a very delicate issue, since the real number of child maltreatment cases is unknown, given that most of them are not detected (Save the Children, 2015; Spanish Childhood Observatory, 2006). According to Spanish

Childhood Observatory (2006) and the Department of Social Welfare of the Government of Valencia (2010) factors such as the lack of a clear definition of child maltreatment, the difficulty in distinguishing child maltreatment from accidental lesions, fear of reporting, poor training of professionals and the lack of confidence in the child protection system may be potential impediments when detecting child abuse cases. Beyond the detection step, the intervention process in Spain also presents several challenges. Specifically, professionals face difficulties caused by the lack of involvement of the family, the balance between interventions based on helping and controlling the family, and the various differences in ethnic and cultural lifestyles (Basells, 2006) Furthermore, lack of resources and prevention programmes needed to cope with child maltreatment cases are also highlighted as factors hindering child protection in the Spanish legislation context (Trenado, Pons-Salvador & Cerezo, 2009).

Therefore, although different challenges have been identified in each country, detection is a common sensitive issue in every place, due to some factors such as public attitudes or cultural aspects, the difficulty in identifying some kind of abuses, the fear of reporting them and the lack of knowledge or specific training. Moreover, the lack of coordination within the system, insufficient human and economic resources, as well as inadequate training of social workers can be considered common difficulties in child protection services by literature. Specifically, some of the main shared obstacles in the countries studied have clearly been poor knowledge and insufficient skills of professionals working in this field in respect to several matters. As mentioned above, effective assistance of children who have been victims or witnessed violence requires intervention by skilled professionals, who must be able to identify and deal effectively with different kinds of child maltreatment. Consequently, this paper pays particular attention to professional's training needs as a key aspect in the process of assisting and supporting children who have fallen victim to violence or who have witnessed violence, in Estonia, Finland, Slovenia and Spain, as a way of improving the ability and capacity to provide assistance to children affected, by professionals working in this field.

### 3. METHODOLOGICAL ISSUES

As mentioned before, the main aim of this report is to identify social workers training needs in Estonia, Finland, Slovenia and Spain. Specifically, this section describes the methodology and instruments used in each country in order to gather information about the potential training needs of the professionals working in the field of child protection.

#### 3.1. Methodological issues in Estonia

In order to map the professional's training needs of child protection workers and psychological counsellors in Estonia, desk research and a content analysis of some relevant reports dealing with this topic was developed. Specifically, the following documents were analysed:

Table 1: Documents analysed in Estonia

Abused child assistance system, Karu (2015)
Training needs assessment analysis of child protection officials, The National Institute for Health Development (2015)
The training plan for the basic training of child protection officials, The National Institute for Health Development (2015)
The need for training and occupational counselling for psychologists providing psychological counselling services, the Ministry of Justice (2015)
Summary of the impact analysis of the draft Child Protection Act, CASS University of Tartu (2013)

#### 3.2. Methodological issues in Finland

In Finland they used the questionnaire <sup>1</sup> technique in order to find out the professional's training needs. The questionnaire was made up of 6 questions, combined with the Likert scale, to gather quantitative data, and open-ended questions to gather qualitative data. This questionnaire was handed over to specialists working in different fields at national level.

<sup>1</sup> More details about the questionnaire are shown in the annex

The answers received came from communal social and health-care specialists and specialists working in philanthropic organizations and private sector. The total amount of answers received was 95 (N=95). Precisely, the composition of the sample was made up of different professionals as Table 2 shows:

Table 2: Finland composition sample

77% of professionals from communal social or health-care
15% of professionals from association or organisation
4% of professionals from private sector
4% Other professionals

### 3.3. Methodological issues in Slovenia

In Slovenia they analysed the professional's training needs through several techniques and methods. In detail the techniques and methods applied were the following:

- Desk research: based on the analysis of web sources such as programs and portals to help child abuse victims and web sources of legislation, regulation and strategies.
- Statistical analysis: analysis of criminal acts reported to the police in Slovenia on victims under 18 years old.
- Interviews<sup>1</sup>: 19 structured interviews with 22 questions were conducted (N=19). The interview covered the following topics: basic information; statistics; forms of help and competences. Interviewees were different specialists working on cases of children victims of violence. Specifically, these professionals belonged to fields and organizations shown in Table 3:

Table 3: Sample of Slovenian centres

Social Work Centres
Juvenile Centres and Residential Groups for Children and Youth
Human right Ombudsman-"defender-The Voice Of A Child" Project
Tom Telefon-Helpline For Children And Youth In Need
Safe Houses For Abused Women And Children
Safe.si And Spletno Oko (web eye)- Centre For Safe Use of the Internet
Police/Criminal Police Directorate- Homicide and Sexual Offences Section (child sexual abuse department)
Judges in Family Courts
Primary School-school Counsellors

### 3.4. Methodological issues in Spain

In order to obtain qualitative information, such as the kind of training needed by professionals working in child protection field, the "focus group" technique was applied in Spain. Specifically, the Spanish focus group was made up of eight professionals with the aim to gather several opinions about this topic. According to the criteria of homogeneity and heterogeneity (Canales & Peinado, 1995), social field professionals and philanthropic organizations were invited. In detail, the profiles of the professionals were the following:

Table 4: Spanish focus group professionals' profiles

Two social workers from municipal social services
A psychologist from family, minors, and youth Section from a local administration
A psychologist from a philanthropic organization
A social worker from a philanthropic organization

<sup>1</sup> The extract of the interview is shown in the annex.

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A psychologist from a centre for minors A social worker working in a hospital A regional manager of a philanthropic organization
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The session of the focus group in Spain was developed and structured according to Llopis (2004) instructions<sup>1</sup>.

#### 4. RESULTS FROM THE ANALYSIS

This section presents the results obtained in the countries studied regarding the professionals' training needs in Estonia, Finland, Slovenia and Spain.

In Estonia, desk research has shown that there is room for improvement in training needs among psychologists and child protector workers. Firstly, regarding psychologists, the analysis has shown that they feel the need for continuing their education in almost all areas of counselling. On the basis of the literature reviewed, the following necessary training topics have been exposed among psychologists: trauma work, complex trauma stabilization, therapy workshops, specific topics (e.g. bodily injuries, domestic violence and parents with a personality disorder, a child caught in the divorce process, the psychological self-help techniques, family violence, protracted grief, and motivation) and legislations to protect victims. Secondly, regarding the training needs of child protection workers, according to a study conducted by TAI (2015a; 2015b), 90% of them expressed the need for further training. In this study, some topics requiring additional training were mapped out. Among them, some important topics were stressed, such as recognizing an abused child and working with families, case management, child welfare assessment framework, means of primary level assessment, motivational interview, networking seminars, forms of conciliation and several aspects related to the legal framework.

The results in Finland showed three main areas in which professionals would rather have a deeper knowledge. First of all, over 80% of professionals felt that they needed more training concerning psychological information about traumas. Specifically, workers in this field stressed the necessity for information about traumas and how to reach children who have been abused or have witnessed violence, or could become victims. Secondly, almost 80% of the interviewees expressed the need for extra training regarding sexual abuse and dealing with victims of foreign backgrounds. Given that a specific group of victims are children of immigrants, 85% of the interviewees said that they would welcome more training regarding this topic, also because of the increase in number of refugees in Finland and their difficulty to understand the Finnish system of protection. Thirdly, legislation was a sensitive topic as half of the interviewees reported that they would require more training about cases in which there is a need to notify the police. Indeed, according to the results, many of the social and health-care specialists did not mention their duty to notify the police when there was a case of child maltreatment. Finally, as for the types of training, 59% of the respondents preferred face to face training to online training. Moreover, some interviewees specified that training based on group conversations would give new perspectives and ideas on how to best deal with child maltreatment cases.

In Slovenia several professional' training needs have been identified by different centres where professionals were interviewed. Although some of them varied depending on centres or the sort of services, Slovenian results have shown some common areas in which professionals have expressed the necessity of in depth knowledge. Areas identified include topics such as training on how to recognise different forms of violence, such as online violence, children's needs, how to communicate with children and how to provide help to child abuse victims.

In Spain, the content analysis of the Spanish focus group mainly discussed the type of training needed and also what kind of content it should have. As for the first aspect, the professionals showed a preference for practical training. In this regard, they stressed the need to have time for reflection in order to share proposals and experiences that may contribute to knowledge exchange. Consequently, they proposed, as a useful type of training, seminars or direct monitoring of cases by other professionals in order to offer opinion or advice. The second main point they discussed focused on addressing the potential training topics. The content analysis showed the following important subjects for consideration: the methodology

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<sup>1</sup> The structure of the focus group session is shown in the annex

for intervention, interviewing skills and the management of emotional involvement when dealing with cases of abuse. Therefore the main conclusions reached in the Spanish focus group was the consensus of the necessity of a practical training course, based on the professional expertise of specialists, and the exchange of knowledge focused on methodological aspects related to the intervention in cases of maltreatment

The following Table 5 summarizes the main professional' needs identified in each country studied:

Table 5: Results: potential professionals' training needs by country. Summary table

Country	Results main professionals training needs
Estonia	Trauma work Complex trauma stabilization Therapy workshops Legislation Psychological self-help techniques and family violence Legislation Recognizing an abused child and work with families Case management Child welfare assessment framework Motivational interview Networking seminars Forms of conciliation
Finland	Psychological information about traumas Sexual abuse and victims of foreign background Legislation Face to face training
Slovenia	Forms of violence and, specifically, online forms of violence Training focused on providing help to child abuse victims Children' needs Communication with children
Spain	A need of a practical training course based on professional expertise and knowledge exchange related to the intervention in cases

## 5. CONCLUSIONS

Child maltreatment is a phenomenon which has a traumatic impact on all aspects of a child's life, causing serious disruptions to their development. Although physical, psychological, sexual abuse and neglect are the most common forms of violence against children, new forms, such as use of apps and the Internet, are starting to appear. In addition, being witness to domestic violence has also been regarded as a recognisable form of child abuse or considered as psychological maltreatment (The Spanish Ministry of Health, Social Policy and Equality, 2011). In order to provide an integral attention, professionals from different areas must work together; they should be able to share cooperation and coordination with services and other peers, as this would prove to be a crucial factor in providing effective assistance to children. Usually, specialists from the education sector, health care, civil and police services, legal and philanthropic organizations are involved in the child protection field. However, the intervention process in cases of child abuse is a sensitive issue that faces specific difficulties depending on several variables, such as the type of abuse, steps taken for intervention procedures and country's characteristics and protection system. In this situation, the cooperation and coordination among services and professionals, as well as their skills, are key factors affecting the prevention and the effective assistance of abused children. Specifically, the role played by professionals working in this field is crucial, they must be able to identify and cope with different kinds of abuse and equally diverse cases of child maltreatment.

Given this situation, the purpose of this paper has been to identify the most challenging issues and difficulties for the professional workers involved in child protection services in Estonia, Finland, Slovenia and Spain; It is known from previous literature that training of professionals is a real challenge that exists in these countries (Childhood Observatory, 2006; the Department of Social Welfare of the Government of Valencia, 2010).

In order to fully explore the professionals' training needs in these countries, a case study has been developed by combining desk research and primary sources of information. The results have shown that in each country, professionals needs have been different. These findings might be related to idiosyncratic features and configuration of the child protection system in each country and also due to the kind of potential users that they have. For example, results in Estonia have shown that the main training needs of professionals are linked to trauma work and psychological and intervention techniques, further development of skills for recognising an abused child, networking and legislation. In Finland, the results obtained have shown that particular attention should be paid to child sexual abuse victims, especially so on children of immigrants, psychological information about traumas and legislation and criminal proceedings. Thus, probably because of the demographic characteristics of the people in Finland, and the increase in refugees, multicultural aspects will require more attention in the future. Besides, legislation and criminal proceedings were also stressed among Finnish training needs. This knowledge is important as it might give the victims better access to their rights and encourage professionals to report abuse cases to the authorities. The research work developed in Slovenia has shown that recognizing forms of violence in general and, especially, new forms of abuse through online channels has been a potential topic of additional training for professionals. They also expressed a clear need of training focused on providing assistance to child abuse victims. Lack of training in this particular area might cause the reduction of direct work and counselling in cases of child abuse in some organizations such as social centres, schools, youth centres and philanthropic organizations. Finally, in Spain the results obtained through the focus group have shown that training courses usually do not take into account the challenges and difficulties professional workers face in real cases of abuse, as they are divorced from social reality. For this reason, they stressed the need of a practical training course based on professional expertise and knowledge exchange related to the intervention in cases of child maltreatment.

In conclusion, the present research paper has contributed positively in broadening and exposing awareness over the training needs of professional workers in Estonia, Finland, Slovenia and Spain, stressing the role played by professionals in cases of child maltreatment. It is considered that results reached in this study show a significant insight into the necessity to reinforce the abilities and resources available to professionals working with these sensitive cases, in an effort to increase the effective and timely assistance of children who have been victims or have witnessed violence.

## REFERENCES

- [1] Alemán, C. (2014). Políticas públicas y marco de protección jurídica del menor en España. *UNED. Revista de Derecho Político*, 90, 97-134.
- [2] Arruabarrena, M. I. (2011). Maltrato psicológico a los niños, niñas y adolescentes en la familia: definición y valoración de su gravedad. *Psychosocial Intervention*, 20, 25-44.
- [3] Balsells, M.A. (2006). Québec y Cataluña: redes y profesionales para la acción socioeducativa con familias, infancia y adolescencia en situación de riesgo social. *Revista Española de Educación Comparada*, 12, 365-387.
- [4] Bartolomé, J.C. (2013). La poliédrica y heterogénea protección internacional de los menores. *Revista sobre la infancia y la adolescencia*, 4, 1-27. DOI: <http://dx.doi.org/10.4995/reinad.2013.1462>.
- [5] Canales, M., & Peinado, A. (1995). "Grupos de discusión". En Delgado, J.M. y Gutiérrez, J. (coord.): *Métodos y técnicas cualitativas de investigación en ciencias sociales*. Madrid: Editorial Síntesis, p. 287 – 316.
- [6] Department of Social Welfare of the Government of Valencia (2010). El papel del ámbito policial en la detección y abordaje de las situaciones de desprotección o maltrato infantil. Valencia: Generalitat Valenciana.
- [7] Department of Social Welfare of the Government of Valencia (2011). El papel del ámbito de los Servicios Sociales en la detección y abordaje de las situaciones de desprotección o maltrato infantil. Valencia: Generalitat Valenciana.
- [8] Estonian Ministry of Justice (2015). The need for training and occupational counseling for psychologists providing psychological counseling service. Retrieved from: [http://www.kriminaalpolitika.ee/sites/krimipolitika/files/elfinder/dokumendid/psuuhh.\\_noustajate\\_toonoustamis-\\_ja\\_koolitusvajadus.pdf](http://www.kriminaalpolitika.ee/sites/krimipolitika/files/elfinder/dokumendid/psuuhh._noustajate_toonoustamis-_ja_koolitusvajadus.pdf)

- [9] Estonian Ministry of Social Affairs (2015). Violence Prevention Strategy (2015-2020). Retrieved from: [http://www.kriminaalpoliitika.ee/sites/www.kriminaalpoliitika.ee/files/elfinder/dokumentid/ves\\_2015-2020\\_1.pdf](http://www.kriminaalpoliitika.ee/sites/www.kriminaalpoliitika.ee/files/elfinder/dokumentid/ves_2015-2020_1.pdf)
- [10] Estonian National Institute for Health Development (TAI) (2015a). Training needs assessment analysis of child protection officials. Retrieved from: [https://intra.tai.ee/images/prints/documents/144014866389\\_Lastekaitset66tajate\\_koolitusvajaduse\\_analysys\\_kokkuv6te.pdf](https://intra.tai.ee/images/prints/documents/144014866389_Lastekaitset66tajate_koolitusvajaduse_analysys_kokkuv6te.pdf)
- [11] Estonian National Institute for Health Development (TAI) (2015b). The training plan for the basic training of child protection officials. Retrieved from: [http://www.tai.ee/images/PDF/Lastekaitsetootajate\\_koolituskava.pdf](http://www.tai.ee/images/PDF/Lastekaitsetootajate_koolituskava.pdf)
- [12] Haage, B. (2015) Lasteaedade ja kohaliku omavalitsuse koostöö Nõmme linnaosa näitel: abivajavast lapsest teavitamine. Tallinna Ülikool
- [13] Karu, J. (2015). Poliitikaanalüüs – Väärkoheldud lapse abistamise süsteem [Policy Analysis – the Assistance System of an Abused Child]. Tallinn: Ministry of Social Affairs.
- [14] Korp, E., & Rääk, R. (2004). Child Protection Work in Local Government. Tallinn: National Institute for Health Development. Retrieved from: [http://www.eatl.ee/wp-content/uploads/Lastekaitsetoeetaja\\_20kasiraamat.pdf](http://www.eatl.ee/wp-content/uploads/Lastekaitsetoeetaja_20kasiraamat.pdf)
- [15] Llopis, R. (2004). *El grupo de discusión: Manual de aplicación a la investigación social, comercial y comunicativa*. Madrid: ESIC Editorial.
- [16] Pinheiro, P.S. (2006). Prevención del maltrato infantil: Qué hacer, y cómo obtener evidencias. Retrieved from: <http://www.unicef.org/violencestudy/spanish/reports/Chapitre%2001%20%20intro.pdf>
- [17] Salla, J., Surva, L., Ilves, K., Soo, K., & Reinomägi, A. (2013) Lapse turvalisus. Retrieved from: [http://www.lastekaitseliit.ee/wp-content/uploads/2011/04/Laste\\_headolu\\_sisu-1.pdf](http://www.lastekaitseliit.ee/wp-content/uploads/2011/04/Laste_headolu_sisu-1.pdf)
- [18] Save the Children (2015). Violencia contra la infancia. Hacia una estrategia integral. Retrieved from: [https://www.savethechildren.es/sites/default/files/imce/docs/violencia\\_contra\\_la\\_infancia-hacia\\_una\\_estrategia\\_integral\\_.pdf](https://www.savethechildren.es/sites/default/files/imce/docs/violencia_contra_la_infancia-hacia_una_estrategia_integral_.pdf)
- [19] Soo, K.; Ilves, K.; and Strömpl, J. (2009). Notification of cases of child abuse and networking. Tartu: Institute of Sociology and Social Policy of University of Tartu
- [20] Spanish Childhood Observatory (2006). La infancia en cifras. Madrid: Ministerio de Trabajo y Asuntos Sociales.
- [21] Spanish Ministry of Health, Social Services and Equality (2011). Maltrato infantil en la familia en España. Retrieved from: [http://www.observatoriodelainfancia.msssi.gob.es/productos/pdf/malt2011v4\\_total\\_100\\_acces.pdf](http://www.observatoriodelainfancia.msssi.gob.es/productos/pdf/malt2011v4_total_100_acces.pdf)
- [22] Spanish Ministry of Health, Social Services and Equality (2013). II Plan Estratégico Nacional de Infancia y Adolescencia 2013-2016. Retrieved from: [http://www.observatoriodelainfancia.msssi.gob.es/documentos/pdf/II\\_PLAN ESTRATEGICO INFANCIA.pdf](http://www.observatoriodelainfancia.msssi.gob.es/documentos/pdf/II_PLAN ESTRATEGICO INFANCIA.pdf) en enero de 2015.
- [23] Spanish Ministry of Health, Social Services and Equality (2014). Protocolo básico de intervención contra el maltrato infantil en el ámbito familiar. Retrieved from: [http://www.observatoriodelainfancia.msssi.gob.es/productos/pdf/MaltratoInfantil\\_accesible.pdf](http://www.observatoriodelainfancia.msssi.gob.es/productos/pdf/MaltratoInfantil_accesible.pdf)
- [24] Spanish Ministry of Social Services and Equality (2015). Plan Integral de Apoyo a la Familia PIAF (2015-2017). Retrieved from: <http://www.msssi.gob.es/novedades/docs/PIAF-2015-2017.pdf>
- [25] Trenado, R., Pons-Salvador, G., & Cerezo, M. A. (2009). Proteger a la infancia: apoyando y asistiendo a las familias. *Papeles del Psicólogo*, 30(1), 24-32.
- [26] University of Tartu (2013). Summary of the impact analysis of the draft Child Protection Act, CASS. Retrieved from: [https://www.sm.ee/sites/default/files/content-editors/Lapsed\\_ja\\_pered/lastekaitse\\_alusanaluus\\_pwc\\_2013\\_27.11\\_2.pdf](https://www.sm.ee/sites/default/files/content-editors/Lapsed_ja_pered/lastekaitse_alusanaluus_pwc_2013_27.11_2.pdf)

- [27] WHO (1999). Report of the consultation on child abuse prevention, Geneva 29-21 March 1999. Geneva : World Health Organization.
- [28] WHO (2009). Prevención del maltrato infantil: Qué hacer, y cómo obtener evidencias. Retrieved from: [http://apps.who.int/iris/bitstream/10665/44228/1/9789243594361\\_spa.pdf](http://apps.who.int/iris/bitstream/10665/44228/1/9789243594361_spa.pdf)

## 8. APPENDIXES

### 1.1. Slovenian extract of interview

The Slovenian extract of interview was the following:

<p><b>BASIC INFORMATION</b></p> <ol style="list-style-type: none"> <li>1. Which organization are you employed in?</li> <li>2. What position?</li> </ol> <p><b>STATISTICS</b></p> <ol style="list-style-type: none"> <li>3. How many cases of child abuse has your organization proceeded in the previous year?</li> <li>4. How many cases of children, witnessing violence have you handled/proceeded in the previous year?</li> <li>5. Who most commonly reports cases of child abuse victims? How do they come in contact with you?</li> <li>6. What is the most common form of child abuse that you encounter?</li> <li>7. Do you work on cases of online violence? How many have you proceeded in the previous year?</li> <li>8. Which legal basis (laws, declarations, conventions) do you most often lean on when working with child abuse victims?</li> </ol> <p><b>FORMS OF HELP/ HELP PROVIDED</b></p> <ol style="list-style-type: none"> <li>9. What programs and forms of help do you provide for child abuse victims?</li> <li>10. What is the procedure (from the beginning to the end)?</li> <li>11. How long do the proceedings usually take?</li> <li>12. What do you believe works well in the proceedings when working with child abuse victims?</li> <li>13. What do you believe are problems in the proceedings of child abuse victims?</li> <li>14. How good is your cooperation with other organizations that work on providing help for child abuse victims? Please rate the question on scale of 1 –5: (1) poor, (2) fair, (3) good, (4) very good and (5) excellent.</li> <li>15. What are the most common issues / cases / reasons that are covered through collaboration?</li> <li>16. Which are the organizations you most often collaborate with?</li> <li>17. Do you collaborate with foreign organizations? If yes, which ones?</li> </ol> <p><b>COMPETENCE</b></p> <ol style="list-style-type: none"> <li>18. What skills and knowledge, in your opinion a person, working with child abuse victims, needs to have?</li> <li>19. Which professional seminars on the topic of child abuse (victims) have you attended in the previous year?</li> <li>20. Which topics do you believe these seminars lack?</li> <li>21. Which topics, in your opinion, are most important and should be obliged for professionals working in the field of child abuse (victims)?</li> <li>22. How would you validate professional work with child abuse victims? Please rate the question on scale of 1 –5: (1) poor, (2) fair, (3) good, (4) very good and (5) excellent</li> </ol>
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### 9.2. Finland questionnaire

The questionnaire which was administrated in Finland was the following:

<ol style="list-style-type: none"> <li>1. Where do you work?</li> <li>2. Have you participated in trainings concerning how to be in contact with a child who has fallen victim of violence or who has witnessed violence?</li> <li>3. Which helping authorities do you get in contact with when you have received information about a child who has fallen victim of violence or who has witnessed violence?</li> <li>4. On a scale of 1 to 5, evaluate how necessary extra training is concerning the following areas (cases where a child has fallen victim of violence or has witnessed violence):</li> </ol>
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- a child welfare notification
  - a notification to the police
  - general information about legislation
  - crises and traumas caused by violence
  - sensitive treatment of victims
  - sexual abuse of children
  - child victims of foreign background
5. How would you want trainings to be organised (contact or online trainings)?
  6. Comment freely on how to develop trainings concerning children who have fallen victim of violence or has witnessed violence

### 9.3 Focus group in Spain

The session of the focus group in Spain was developed and structured according to Llopis (2004) instructions. Specifically, the session was structured as follows:

1. **INTRODUCTION**
  - a. Moderators introduction
  - b. Introduction institution
  - c. Objectives of the meeting
    - i. Topic of the meeting
  - d. Confidentiality and recording of the meeting
  - e. Rules of the meeting
    - i. Several opinions, consensus is not needed
    - ii. There is not an absolute truth
    - iii. Not to interrupt
    - iv. Honest answers
2. **INTRODUCTION OF PARTICIPANTS**
  - a. Name
  - b. Institution
  - c. Position
3. **WARM-UP DISCUSSION (Difficulties in a hypothetical case of child maltreatment)**
  - a. Detection
  - b. Notification
  - c. Intervention
  - d. Professionals coordination
4. **FREE DISCUSSION.**
  - a. Skills self-learned
5. **TOPICS TO DISCUSS**
  - a. Current training deficiencies
  - b. Description of courses taken that have been helpful
  - c. Type of future training
6. **OPINIONS TO BE CONSIDERED ("Advice to the President")**
7. **CLOSING AND THANKS**

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## Identifying Resilient and Non-Resilient Labour Conditions in Europe Using Qualitative Comparative Analysis

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### Abstract

Based on the concept of labour market resilience, this paper is aimed to determine the combination of initial conditions behind resilient and non-resilient labour markets after the financial crisis in 2008 in Europe. We start from the assumption that some initial conditions in 2007 are crucial to achieve a specific labour result when a shock appears. In this sense, the effect of temporary employment in cyclical sectors, labour market flexibility, the level of education among the workforce, and the expenditure on Labour Market Policies (LMP) have been tested using crisp-set Qualitative Comparative Analysis (csQCA) in 25 European countries. Whilst our results do not explain labour market resilience in its entirety, we have found a model explaining 85% of the non-resilient cases. These findings suggest that the different levels of initial conditions may have prompted dissimilar labour adjustments with varying success rates in dealing with the job losses.

**Keywords:** resilience, labour market, economic crisis, crisis effects, Qualitative Comparative Analysis (QCA), European Union.

### Introduction

Based on the concept of labour market resilience, the aim of this paper is to determine the combination of conditions that are behind both resilient and non-resilient labour markets after the onset of the financial crisis in 2008 in Europe.

The crisis had a clear impact not only on the economy but also on the labour markets, deteriorating the employment figures (Arpaia & Curci, 2010; Brada & Signorelli, 2012; Eichhorst, Escudero, Marx, & Tobin, 2010a; Lallement, 2011; Marelli, Patuelli, & Signorelli, 2012a; Marelli, Signorelli, & Tyrowicz, 2012b; Tridico, 2013; Vaughan-Whitehead, 2011). However, such deterioration has been dissimilar as the different European labour markets have shown a range of strategies in dealing with the crisis to reduce its effects on the workforce (Ball, 2014; Bell & Blanchflower, 2011; Eichhorst et al., 2010a; Guichard and Rusticelli, 2010; OECD, 2010; Verick, 2009).

Given this diversity, the term of *resilience* has emerged as an important concept explaining these differences. Although this concept has been widely applied to a large number of disciplines to generally describe the ability of a system to bounce back to a previously favourable state (Bahadur, Ibrahim, & Tanner, 2010), the term has been recently linked to the labour market in order to explain its ability to deal with economic shocks (Bigos, Qaran, Fenger, Koster, Mascini, & van der Veen, 2013; Fenger, Koster, Struyven, & van der Veen, 2014; Murias, Martínez-Roget, Novello, & Estévez-Núñez, 2012; OECD,

2012). In light of such an idea, the key question that arises is which causal configurations might reinforce labour market resilience and which ones weaken it.

Whilst there is a large body of research focused on those general factors that can affect the capacity of an economy or region to resist and recover after an economic shock, there are limited studies analysing those factors which enhance labour market resilience. Considering this gap, the purpose of this study is to identify the combination of initial conditions that are behind the resilient and non-resilient labour markets in the European countries during the crisis by using Qualitative Comparative Analysis (QCA). We start from the assumption that some initial labour conditions given before the crisis are crucial in explaining labour market results in the short term when a shock appears (Arpaia & Curci, 2010; OECD, 2012).

## Theoretical Framework

In this section, the main interpretations of the concept of resilience are reviewed, the main ways of conceptualisation and operationalisation of the labour resilience found in literature are pinpointed, and those potential factors affecting the performance of labour markets and resilience are discussed.

### Main approaches and interpretations of the resilience concept in the literature

Etymologically, the term *resilience* comes from the Latin word *resilire*, which means *to leap back or to rebound* after a shock. During the last years, different disciplines have widely applied the concept of resilience, hampering its conceptualisation and operationalisation (Bahadur et al., 2010; Lisnyak, 2015; Martin, 2012; Martin & Sunley, 2014; Simmie & Martin, 2010). Be that as it may, engineering, ecological, and adaptive systems are the three perspectives commonly accepted in literature (Di Caro, 2014; Martin, 2012; Martin & Sunley, 2014; Simmie & Martin, 2010).

Under the **engineering** approach, resilience relies on the idea of equilibrium or *bounce back* (Martin & Sunley, 2014). Within this approach, a shock displaces a system from its equilibrium state, and its resilience capacity refers to its ability to return to its pre-shock equilibrium (Folke et al., 2010; Martin & Sunley, 2014; Pendall, Foster, & Cowell, 2010).

From an **ecological perspective**, the concept of resilience emphasizes two points: the absorption capacity of a system and the idea of multiple equilibria. Thus, the ecological approach is primarily focused on the absorption capacity of a system without alterations in state, structure, function, and identity (Berkes & Folke, 1998; Martin & Sunley, 2014; Rose, 2009; Walker et al., 2006). However, if a shock exceeds that *elasticity threshold*, this disturbance will push the system into some other alternative equilibrium which might be different to the pre-equilibria, implying changes in its structure and function (Martin & Sunley, 2014; Walker et al., 2006).

The third interpretation, the so called **adaptive resilience**, builds upon the idea of *bounce forward* (Martin & Sunley, 2014). This perspective places particular emphasis on the adaptation capacity of a system and how well it adapts its structure and functions to deal with a crisis (Boschma, 2015; Christopherson, Michie, & Tyle, 2010; Martin & Sunley, 2014; Simmie & Martin, 2010).

### Conceptual definitions of labour market resilience

While it is true that the concept of economic regional resilience has been studied in more detail in the last years, the literature related to labour market resilience is still scarce, with some specific but disjointed studies. These dissimilarities not only rely on the aforementioned different approaches but also on the kind of resilient ability applied to the labour market. In such a way, labour market resilience has been defined by considering the effects of the crisis on the workforce (Diodato & Weterings, 2015; OECD, 2012) whereas it has also been understood as the capacity not only to resist, withstand, or quickly recover but also to renew, adjust, or re-orientate (Fenger et al., 2014). In accordance with this later approach, some definitions have also added the capacity of a labour market to mitigate the impact on employment levels, specifically for vulnerable groups (Bigos et al., 2013). In this way, this view takes it a step further since they also involve the capacity of a labour market to mitigate their impact on the employment levels, specifically for vulnerable groups (Bigos et al., 2013).

Thus, the labour resilience is sometimes linked to the ability of a labour market to *bounce back* or resist, while other approaches stress the labour market absorption ability or adaptability as a core aspect in line with the ecological and the adaptive approach.

### **Operational definitions of labour market resilience**

Generally speaking, the concept of resilience related to employment shocks has been measured in different ways (Lisnyak, 2015). Despite this variety, at least two ways of measuring resilience are stood out in the literature: resilience gauged through single variables, and resilience as a complex construct made up of different dimensions and indicators.

Within the first perspective, some authors have gauged resilience to economic shocks either considering unemployment (Murias et al., 2012; Tsai, Wilson, & Rahman, 2015) or employment figures as the dependent variable (Augustine, Wolman, Wial, & McMillen, 2013; Di Caro, 2014; Fingleton, Garretsen, & Martin, 2012; Hill et al., 2011; Lungová, 2013; Martin, 2012). However, the employment level seems to be a key factor as their recovery might be more critical and might be compatible with different dynamics of unemployment (Brada & Signorelli, 2012; Lungová, 2013; Martin, 2012).

Finally, some authors have considered resilience in broad terms as a construct composed of several dimensions and indicators beyond economic or labour factors. The idea behind is that one single attribute cannot explain a phenomenon as complex as resilience (Arpaia & Bates, 2015; Bates, Angeon, & Ainouche, 2014; Briguglio, Cordina, Bugeja, & Farrugia, 2006; Briguglio, Cordina, Farrugia, & Vella, 2009; EDAW & AECOM, 2009; Kahsai, Yu, Middleton, Schaeffer, & Jackson, 2015). Although every index differs from each other, commonly, indexes measuring resilience involve economic, educational, governmental, social and environmental areas.

### **Potential factors affecting the labour market performance and its resilience**

An important question arising when studying labour market resilience is which factors lead to a resilient and non-resilient result when a crisis appears and in which way they are combined to lead to a specific outcome. From the labour market resilience theoretical framework, Bigos et al. (2013) and Fenger et al. (2014) have underlined several institutional, structural-demographic, and socio-economic variables which might explain labour market resilience. Based on their contributions, the labour market performance is contingent upon the country's socio-economic factors such as the size of industry, regional disparities, and industrial structure.

Similarly, other studies have underlined these factors. For instance, the importance of the industry and the economic structure relies on the sensitivity of some economic sectors to shocks (Martin, 2012). In this regard, manufacturing, production, and construction have been considered as more cyclical sectors to the crisis (Barakat, Holler, Prettnner, & Schuste, 2010; Eichhorst et al., 2010a; Lungová, 2013; Marelli et al., 2012a; OECD, 2010). Subsequently, the higher the portion of these sectors in the economy, the higher damage to labour results and resilience (Martin, 2012; Murias et al., 2012).

Institutional factors might also be important for the labour market results and resilience by affecting the job creation and destruction, and explaining the unemployment figures (Arpaia & Curci, 2010; Bigos et al., 2013; Duval, Eris, & Furceri, 2011; Eichhorst et al., 2010a; Eichhorst, Feil, & Marx, 2010b; OECD, 2012; Vaughan-Whitehead, 2011). Elements such as passive and active labour market policies, employment legislation, kind of contracts, and wages, among others, might be potential elements to take into account in the study of labour market resilience (Bigos et al., 2013; Brada & Signorelli, 2012). Thus, when it comes to labour market results, labour market policies might be one of the key pillars.

Other findings suggest that the higher levels of flexibility, the higher levels of unemployment, diminishing its potential effect on labour market resilience (Marelli et al., 2012a; Tridico, 2013). Be that as it may, although the European countries are moving towards more flexible labour relations, there are large differences among them. Thereby, flexibility might not necessarily lead to bad labour market results as they depend on the different industrial relations systems where flexibility takes place (Miguélez & Prieto, 2009).

Nevertheless, it seems that the different levels of the employment protection legislation together with labour market policies have allowed different labour adjustment during the crisis (Eichhorst et al., 2010b; OECD, 2012; Tridico, 2013). Adjustments based on internal flexibility, such as adjustments in working-time, have been considered as a key factor limiting the deterioration of employment figures (Arpaia & Curci, 2010; Eichhorst et al., 2010b; Marelli et al., 2012a). Conversely, temporary workers have borne the brunt of employment losses across countries during the crisis (Arpaia & Curci, 2010; Eichhorst et al., 2010a; Marelli et al., 2012a; OECD, 2010; 2012; Sánchez, 2009; Tridico, 2013; Vaughan-Whitehead, 2011). According to Tridico (2013), responses based on external flexibility, such as dismissals, have been more common

in those countries which had a higher level of temporary employment before the crisis. In addition, temporality in cyclical sectors such as manufacturing or construction might increase the negative effects on labour markets by increasing their cyclical effects as these sectors have strongly been hit by the crisis (Barakat, et al., 2010; Eichhorst et al., 2010a; Marelli et al., 2012a; OCDE, 2010).

Additionally, human capital is an important factor according to the literature (Brada & Signorelli, 2012; Christopherson et al., 2010; Diodato & Weterings, 2015; Eichhorst et al., 2010a; Lungová, 2013). The strength of high educational levels among the workforce not only benefits its ability to increase the employment levels but also to protect against unemployment (Augustine et al., 2013; Barakat, et al., 2010; Di Caro, 2014; Murias et al., 2012; Svoboda & Maštálka, 2013; Tsai et al., 2015). According to Arpaia and Curci (2010), human capital is especially important when the responses to the crises require a sectoral reallocation of the workforce from a traditional declining sector.

This review suggests that some initial labour conditions might affect labour market resilience and non-resilience when a crisis occurs. Thus, considering the aforementioned factors, this paper is focused on determining which combination of initial conditions of the labour markets in 2007 may lead to a resilient and non-resilient result after suffering a crisis. In this regard, initial conditions such as the level of education among the workforce, the level of expenditure on LMP, the proportion of temporary employment in construction and manufacturing, and the level of flexibility of the labour market in 2007 have been considered.

## Methods

The sample includes all the European countries with available data regarding the variables of interest provided by official databases, involving 25 countries: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Latvia, Luxembourg, Hungary, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom, and Norway.

The methodology used for the analysis was Qualitative Comparative Analysis (QCA), which focuses on testing alternative, theory-based, complex (conjunctive) causal recipes of antecedent conditions –including context influences– (Woodside and de Villiers, 2011). In particular, crisp-set QCA (**csQCA**) was the chosen modality, and the software used to perform the analysis was R software (R Core Team, 2015). Crisp-set QCA is based on the Boolean algebra, which includes two qualitative different states: true (or present), represented by 1; and false (or absent), represented by 0 (Ragin, 1987). Their main steps are the truth table performance and the Boolean minimisation (Thiem and Duşa, 2013) with the aim of identifying sufficient and necessary conditions (Schneider and Wageman, 2012). One **condition** (the term used in QCA when referring to a variable) is **necessary** for a specific outcome if the condition must be present for the outcome to occur (Ragin, 1987). In other words, the outcome will not occur in the absence of that condition. However, the condition may be present without leading to the outcome. On the other hand, one condition is **sufficient** for a specific outcome if such outcome occurs whenever the condition is present, although the outcome may come from other conditions. As the aim of this paper is to identify the combination of conditions leading to labour resilience –or not resilience–, and a necessary condition may be present without the outcome, only the analysis of sufficiency will be performed. In the analysis of sufficiency, the first step is to perform the **truth table** from the raw data, which is a table similar to a database showing all the possible logical combinations of the conditions included in the analysis. In the truth table, each row is a different configuration, denoting a qualitative different combination of conditions (Schneider and Wagemann, 2012). The analysis of sufficiency and the Boolean minimisation come out of the truth table. The **Boolean minimisation** is a procedure for determining necessity and sufficiency and for reducing explanations to its minimum expression. In accordance to Ragin (1987): “If two Boolean expressions differ only in one condition and nevertheless both reproduce the same outcome, then, the causal condition that distinguishes both expressions can be considered irrelevant and can be removed to create a new expression simpler than before”. QCA provides three solutions: the complex solution, the parsimonious solution, and the intermediate one. The solution presented in this study is the parsimonious solution as it is the only one representing causal structures (Baumgartner, 2013).

Regarding the **parameters of fit**, the solution provides two measures named consistency and coverage. According to Ragin (2006), “set-theoretic **consistency** assesses the degree to which the cases sharing a given condition or combination of conditions [...] agree in displaying the outcome in question”. In other words, the consistency indicates how many cases with a specific configuration show a positive outcome. On the other hand, set-theoretic **coverage** “assesses the degree to

which a cause or causal combination accounts for instances of an outcome" (Ragin, 2006). This definition implies that the coverage indicates how many cases with a positive outcome show the configuration or configurations included in the solution, giving the proportion of cases explained by the solution.

On the basis of the different approaches of resilience aforementioned, the concept of labour resilience and non-resilience in this paper is built upon the engineering approach, understanding labour market resilience as the ability of a labour market to bounce back to its pre-crisis equilibrium in order to study resilience in the short term. Based on such approach, the outcome (labour resilience) has been defined in terms of employment figures following previous studies (Augustine et al., 2013; Di Caro, 2014; Fingleton et al., 2012; Hill et al., 2011; Lungová, 2013; Martin, 2012). According to other studies, the time framework has been defined from 2007 to 2010 so as to study how initial conditions in 2007 can affect labour market resilient in the short term (Bigos, Qaran, Fenger, Koster, & van der Veen, 2014; Tsai et al., 2015). Bearing in mind this time framework, if the difference in the employment rate between 2007 and 2010 was positive or zero, and the employment levels did not drop in 2011 in relation to 2007, that country has been regarded as resilient and calibrated as 1. On the other hand, if the difference was negative, it has been considered as not resilient due to the fact that the country was not able to overcome the impact of the economic crisis and it has been calibrated as 0. In such a way, and following the engineering approach, we are able to measure the ability of a labour market to bounce back to its pre-crisis equilibrium.

As the main objective of this paper is to determine the combination of initial conditions that are behind resilient and non-resilient labour markets, every variable has been considered as present (1) if the initial value in 2007 was equal or higher than the median of the countries included in the study in that specific condition. Otherwise, they have been considered as not present and calibrated as 0.

(Here Table 1)

## Results

In this section, the main findings of the study are presented according to the following model:

Resilience= f (flexibility, labour market policies, educational level, cyclic temporary work)

Building upon the definition of labour resilience provided in the previous section, only five countries of the sample were resilient as they were able to maintain or even increase their employment rate between 2007 and 2010: Germany, Luxembourg, Austria, Poland, and Romania. The other European countries included in the study (Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Ireland, Greece, Spain, France, Italy, Latvia, Hungary, Netherlands, Portugal, Slovenia, Slovakia, Finland, Sweden, United Kingdom, and Norway) were non-resilient in 2010.

Initially, the analysis of the sufficient conditions leading to a **resilient** outcome was performed but, since there are only five resilient countries and the cases included in the truth table (Table 2) are only three, the solution (Table 3) only explains 60% of the resilient cases. The symbol \* represents the logical operator AND, thus the conditions connected by this symbol conform to a sufficient configuration leading to the outcome when the solution provides good values in the parameters of fit (consistency and coverage).

(Here Table 2)

As mentioned above, only Austria, Poland, Germany, Romania, and Luxembourg achieved a resilient outcome in 2010. The analysis of sufficiency for the resilient countries (Table 3) shows that there is a unique configuration leading to a resilient outcome, present in 60% of the resilient cases (Austria, Poland, and Germany). Specifically, the solution implies that those countries which had a higher level of education among the workforce than the median, and a higher expenditure on labour market policies together with a higher level of temporary employment in cyclical sectors in 2007, were resilient in 2010. As highlighted in the theoretical framework, the combination of human capital and labour market policies is especially important when the responses to the crises require a sectorial reallocation of the workforce (Arpaia & Curci, 2010; Eichhorst et al., 2010a). In this sense, according to Eurostat data (2015), Germany was the country with the third highest employment loss in manufacturing, after the UK and Spain. In addition, Austria and Poland also registered a decrease in this indicator although it was not as significant as in Germany. In spite of this fact, the total level of employment in these countries increased from 2007 to 2010, suggesting a possible redistribution of the unemployed from this sector to others.

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Nevertheless, although the solution provided by the analysis of sufficiency has a consistency equal to 1, which indicates that no non-resilient country had this configuration, there are only three resilient countries included in the solution and the coverage of 0.60 is not good enough to draw any firm conclusion about the causal configurations leading to labour resilience. Therefore, the conclusions reached through the analysis of sufficient conditions for resilience are not conclusive and must be taken with great caution.

(Here Table 3)

Regarding the **non-resilient** countries, the truth table includes seventeen cases (Table 4). As seen in table 5, there is only one solution including five prime implicants leading to a non-resilient outcome in our study. This solution has a consistency equal to 1, meaning that every country showing one of the configurations included in the solution have been non-resilient. In other words, no resilient country shows any of these configurations. Moreover, the solution coverage is good as this solution explains 85% of the non-resilient cases.

(Here Table 4)

(Here Table 5)

The first configuration included in the solution involves the cases of Bulgaria, United Kingdom, and Greece, and implies that an initial expenditure on labour market policies (LMP) lower than the median together with a low temporary employment in cyclical sectors is sufficient to lead to a non-resilient labour market result. According to the literature review, a low level of temporary employment in cyclical sectors is deemed to be a potential resilient factor (Arpaia & Curci, 2010; Barakat et al., 2010; Eichhorst et al., 2010a; 2010b; Lungová, 2013; OECD, 2010; 2012; Sánchez, 2009; Tridico, 2013; Vaughan-Whitehead, 2011). However, the results have shown that the countries with a low level of this condition are non-resilient if it is combined with a level of expenditure on active market policies below the median.

The second prime implicant leading to a non-resilient outcome includes an educational level higher than the median together with a low expenditure on active policies in 2007. This prime implicant has been present in Czech Republic, Estonia, Slovenia, Latvia, Hungary, and Slovakia. Although a high level of education has been regarded as a positive aspect in the literature due to its ability to increase the employment levels and to protect against unemployment (Augustine et al., 2013; Barakat, et al., 2010; Di Caro, 2014; Murias et al., 2012; Svoboda & Maštálka, 2013; Tsai et al., 2015), the combination of this factor with a low expenditure on active policies has led to a non-resilient result. This finding suggests that, due to the lack of a high expenditure on active policies, some labour adjustments might not be possible when a crisis occurs. According to Arpaia and Curci (2010), the combination of a high level of both variables is important when the responses to the crises require external flexibility practices such as sectoral redistribution of the workforce from a traditional declining sector.

The third prime implicant includes an initial educational level lower than the median together with a high flexibility, present in Belgium, Denmark, Ireland, Netherlands, and Italy. This result could shed light on the effect of flexibility in combination with other factors. As noted in the previous section, the effect of flexibility in labour markets can be different depending on the context (Miguélez and Prieto, 2009). In this way, QCA is advantageous in finding different combinations leading to an outcome, which is known as equifinality. This fact implies that the effect of one condition might be different when it is combined with diverse conditions.

The fourth configuration combines a high initial educational level and a low temporary employment in cyclical sectors, involving Bulgaria, United Kingdom, Finland, and Sweden. Although both indicators are understood as potential conditions leading to a resilient result, these countries were non-resilient. The case of the United Kingdom is remarkable as it had the highest loss in manufacturing employment together with the second highest drop in the construction sector from the sample. Once again, the results suggest that these labour markets did not have enough tools to deal with the job losses when a crisis occurs despite presenting both conditions.

Finally, the last configuration leading to a non-resilient outcome includes an initial educational level lower than the median together with a high expenditure on labour policies and a high temporality in cyclical sectors. This configuration, covering only the case of Spain, suggests that a high level of expenditure on LMP is not enough to lead to a resilient labour market if there is a high proportion of temporary employment in cyclical sectors combined with a low level of education among the

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workforce. According to Eurostat (2015), Spain was the country with the highest employment losses in the construction sector and the second one in manufacturing losses, after the United Kingdom. Consequently, a low level of education among the workforce may hamper some labour adjustments based on the redistribution of unemployed people from these sectors to others, even when there is a high expenditure on LMP (Arpaia and Curci, 2010; Eichhorst et al., 2010a).

In light of the aforementioned results, the findings suggest that the variables analysed do not explain the resilience satisfactorily, but they explain the non-resilient results. Therefore, the stated hypothesis cannot be verified as no resilient country presented it. However, a similar configuration has been found in Germany, which, unlike the initial assumption, had a level of temporary employment in cyclical sectors over the median.

As for non-resilient cases, although both a low level of temporality in cyclical sectors and a high level of education among the workforce are considered positive conditions in themselves to achieve resilient labour markets, the combination of each of them with a low expenditure on LMP in 2007 led to a non-resilient result in 2010, as shown in configurations one and two. In the same way, a high level of education in 2007 together with either a low expenditure on LMP or low temporary employment in cyclical sectors led to a non-resilient result as seen in configurations two and four. Finally, as for the temporary cyclical sectors, the same situation occurs when a low level of this condition, considered as a positive factor leading to a resilient result, is combined with either a low level of expenditure on LMP or a high educational level, resulting in a non-resilient labour market.

## Conclusions

Building on the concept of resilience, the aim of this paper was to determine the combination of initial conditions that can lead to a resilient or non-resilient labour market result after the impact of the financial crisis in 2008. This article started from the statement that some initial labour conditions can matter for resilience and non-resilience labour market when a shock appears. Specifically, it was upheld that labour markets which had a high proportion of workforce with a high level of education, a high expenditure on labour market policies, and a low level of temporary employment in construction and manufacturing in 2007 were more likely to be resilient in 2010. In addition, as the potential effect of labour flexibility is not clear in the literature, this variable was included into the model so as to test its implication.

Thus, the model: Resilience =  $f$  (flexibility, labour market policies, educational level, cyclic temporary work) has been tested by using the csQCA methodology in order to find causal configurations leading to a resilient and non-resilient result.

Based on the engineering approach, labour market resilience has been understood as the ability to bounce back to the pre-crisis equilibrium. In this regard, resilience has been operationalised considering the employment levels from 2007 to 2010. Resilient countries were those in which employment levels in 2010 were, at least, the same as 2007 and did not experience a drop in 2011 in relation to 2007, while non-resilient countries were those which could not bounce back to their pre-shock levels of employment in 2010.

The results have revealed that there were more non-resilient countries than resilient ones in the European labour markets since only Germany, Luxembourg, Austria, Poland, and Romania were resilient according to the definition provided. Besides, the findings show that the variables analysed do not explain the resilience in a satisfactory way, since a combination of factors covering 60% of resilient countries has been found. However, the results have shown the configurations that can lead to non-resilient labour markets explaining 85% of non-resilient cases. The analysis of sufficiency for non-resilience has provided one solution with five prime implicants suggesting that different combinations of initial conditions may have prompted dissimilar labour adjustment dealing with the job losses.

However, as mentioned above, the study has had some limitations explaining the phenomenon of resilience. These limitations are mainly due to the scarcity of resilient cases and the coverage of the model. In this sense, the number of resilient and non-resilient countries in 2010 was very unbalanced. In addition, some resilient countries, such as Malta, Switzerland, and Macedonia, were eliminated from the sample due to a lack of available data of the variables included in the model. Therefore, both these facts might have affected the relevance of the results regarding resilient labour markets. Given such circumstances, it has been considered that these limitations could be overcome by studying resilience in a long-term perspective, amplifying the temporal dimension. By implementing this change, the sample of resilient countries could be larger as more countries might have recovered. However, the idea that the impact of the initial labour conditions

should be studied in the short-term after a shock has been supported. Otherwise, the effect of the responses from the governments may diminish the impact of the initial labour conditions due to fact that effect of different policies implemented during the crisis would appear in the results.

Another issue is that, since resilience has been considered as the ability of a labour market to bounce back to its pre-crisis level of employment, if the pre-crisis level of employment was high or not in a country in itself has been left out. Therefore, under this model, some countries have not been considered as resilient as they did not meet the resilience condition in spite of having high initial levels of employment (e.g., Norway). Such a fact has been understood as a limitation of the study since promoting and maintaining high levels of employment is a key issue in the European labour policies which may be considered as an aspect of resilience. Nevertheless, the objective of this article was to study labour resilience from the engineering perspective which does not take into account this aspect.

Besides the limitation of the operationalisation of resilience, the calibration was based on the median of the sample countries which facilitated the division into two parts of the distribution data. Given the difficulty of establishing a threshold for every variable when there is not any theoretical cut-off point related to such issue, the median was chosen as this threshold.

Be that as it may, the present research has contributed to broadening knowledge of the conceptual framework of labour market resilience by identifying different configurations of conditions leading to non-resilient labour markets during the crisis. According to our knowledge of the subject, this work is a pioneering study as it represents the first research of labour market resilience by using the Qualitative Comparative Analysis methodology (QCA) to date. Therefore, this work provides a first approximation in the study of labour market resilience by using the aforementioned methodology and this study could serve as a model for future works.

As the results obtained have implied that some variables might be relevant allowing some kinds of labour adjustments, future research should focus on the sort of adjustments and responses carried out by resilient and non-resilient countries. This approach will allow us to study labour market resilience in the long-term, amplifying the time framework and increasing the number or resilient countries so as to overcome the limitations of this work.

## References

- [1] Angeon, V., & Bates, S. (2015). Reviewing Composite Vulnerability and Resilience Indexes: A Sustainable Approach and Application, *World Development*, 72, 140–162.
- [2] Arpaia, A., & Curci, N. (2010). EU labour market behaviour during the Great Recession Economic Papers 405. [http://ec.europa.eu/economy\\_finance/publications/economic\\_paper/2010/pdf/ecp405\\_en.pdf](http://ec.europa.eu/economy_finance/publications/economic_paper/2010/pdf/ecp405_en.pdf). Accessed 26 February 2016.
- [3] Augustine, N., Wolman, H., Wial, H., & McMillen, M. (2013). Regional Economic Capacity, Economic Shocks, and Economic Resilience, BRR working paper 2013, Institute of Urban and Regional Development, Berkeley. <http://brr.berkeley.edu/wp-content/uploads/2013/05/Augustine-resilience-capacity2.pdf>. Accessed 26 February 2016.
- [4] Bahadur, A.V., Ibrahim, M., & Tanner, T. (2010). The resilience renaissance? Unpacking of resilience for tackling climate change and disasters. CSR Discussion Paper No.1, Strengthening Climate Resilience programme, Brighton: IDS. [http://www.fsnnetwork.org/sites/default/files/ids\\_resilience-renaissance.pdf](http://www.fsnnetwork.org/sites/default/files/ids_resilience-renaissance.pdf). Accessed 26 February 2016.
- [5] Ball, L.M. (2014). Long-term damage from the great recession in OECD countries. NBER Working Paper No. 20185. <http://www.nber.org/papers/w20185.pdf>. Accessed 26 February 2016.
- [6] Barakat, B., Holler, J., Prettnner, K. & Schuste, J. (2010). The impact of the crisis on labour and education in Europe, Vienna Institute of Demography Working Paper. [http://www.oeaw.ac.at/vid/download/WP2010\\_06.pdf](http://www.oeaw.ac.at/vid/download/WP2010_06.pdf). Accessed 26 February 2016.
- [7] Bates, S., Angeon, V., & Ainouche, A. (2014). The pentagon of vulnerability and resilience: A methodological proposal in development economics by using graph theory. *Economic Modelling*, 42, 445-453.
- [8] Baumgartner, M. (2013). Parsimony and Causality. *Quality and Quantity*, 49, 839-856.
- [9] Bell, D. N. F., & Blanchflower, D. G. (2011). Youth unemployment in Europe and the United States, Discussion paper series, Forschungsinstitut zur Zukunft der Arbeit, No. 5673. <http://nbn-resolving.de/urn:nbn:de:101:1-201105173099>. Accessed 26 February 2016.

- [10] Berkes, F., & Folke, C. (1998). *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*. New York: Cambridge University Press.
- [11] Bernal-Verdugo, L.E., Furceri, D., & Guillaume, D. (2012). Labour Market Flexibility and Unemployment: New Empirical Evidence of Static and Dynamic Effects, *Comparative Economic Studies*, 54, 251-73. doi:10.1057/ces.2012.3
- [12] Bigos, M., Qaran, W., Fenger, M., Koster, F., Mascini, P., & van der Veen, R. (2013). Review essay on labour market resilience [D1.1]. [http://www.inspires-research.eu/userfiles/D1\\_1%20Review%20Essay%20on%20Labour%20Market%20Resilience.pdf](http://www.inspires-research.eu/userfiles/D1_1%20Review%20Essay%20on%20Labour%20Market%20Resilience.pdf). Accessed 26 February 2016.
- [13] Bigos, M., Qaran, W., Fenger, M., Koster, F., & van der Veen, R. (2014). Benchmark Report on Labour market resilience. [http://www.inspires-research.eu/userfiles/D1\\_3%20Benchmark%20Report%20on%20Labour%20market%20resilience.pdf](http://www.inspires-research.eu/userfiles/D1_3%20Benchmark%20Report%20on%20Labour%20market%20resilience.pdf). Accessed 26 February 2016.
- [14] Boschma, R. (2015). Towards an Evolutionary Perspective on Regional Resilience, *Regional Studies*, 49, 733-751. doi: 10.1080/00343404.2014.959481
- [15] Brada, J., & Signorelli, M. (2012). Comparing Labour Market Performance: Some Stylized Facts and Key Findings, *Comparative Economic Studies*, 54, 231-250.
- [16] Briguglio, L., Cordina, G., Bugeja, S., & Farrugia, N. (2006). Conceptualizing and Measuring Economic Resilience. Working paper, Economics Department, University of Malta. [https://www.um.edu.mt/data/assets/pdf\\_file/0013/44122/resilience\\_index.pdf](https://www.um.edu.mt/data/assets/pdf_file/0013/44122/resilience_index.pdf). Accessed 26 February 2016.
- [17] Briguglio, L., Cordina, G., Farrugia, N., & Vella, S. (2009). Economic vulnerability and resilience: Concepts and measurements, *Oxford Development Studies*, 37, 229-247.
- [18] Christopherson, S., Michie, J., & Tyle, P. (2010). Regional resilience: theoretical and empirical perspectives, *Cambridge Journal of Regions Economy and Society*, 3, 3-10. doi:10.1093/cjres/rsq004
- [19] Di Caro, P. (2014). Recessions, recoveries and regional resilience: evidence on Italy, *Cambridge Journal of Regions, Economy and Society*, 8, 273-291. doi: 10.1093/cjres/rsu029
- [20] Diodato, D., & Weterings, A.B.R. (2015). The resilience of regional labour markets to economic shocks: exploring the role of interactions among firms and workers, *Journal of Economic Geography*, 15, 723-742. doi:10.1093/jeg/lbu030
- [21] Duval, R., Eris, M., & Furceri, D. (2011). The Effects of Downturns on Labour Force Participation: Evidence and Causes. OECD Economics Department Working Papers, No. 875, OECD Publishing. [http://www.oecd-ilibrary.org/economics/the-effects-of-downturns-on-labour-force-participation\\_5kq9q0nmbws8-en?crawler=true](http://www.oecd-ilibrary.org/economics/the-effects-of-downturns-on-labour-force-participation_5kq9q0nmbws8-en?crawler=true). Accessed 26 February 2016.
- [22] EDAW & AECOM (2009). Index of Economic Resilience, Sheffield City Region Report, Reference 208632. <http://sheffieldcityregion.org.uk/wp-content/themes/lepress/Downloads/Index%20of%20Economic%20Resilience%20Report.pdf>. Accessed 26 February 2016.
- [23] Eichhorst, W., Escudero, V., Marx, P., & Tobin, S. (2010a). The impact of the crisis on employment and the role of labour market institutions, IZA Discussion Paper No. 5320, Institute for the Study of Labor (IZA), Bonn. <http://ftp.iza.org/dp5320.pdf>. Accessed 26 February 2016.
- [24] Eichhorst, W., Feil, M.T., & Marx, P. (2010b). What crisis? Patterns of adaptation in European labour markets, IZA Discussion Paper No. 5045, Institute for the Study of Labor (IZA), Bonn. <http://ftp.iza.org/dp5045.pdf>. Accessed 26 February 2016.
- [25] Eurostat Unemployment Statistics (2015) Labour Force Survey (LFS). <http://ec.europa.eu/eurostat/web/labour-market/statistics-illustrated>. Accessed 26 February 2016.
- [26] Fenger, M., Koster, F., Struyven, L., & van der Veen, R. (2014). Smart Policies or Sheer Luck? Labour Market Resilience in the Low Countries, *Social policy and administration*, 48, 492-513.
- [27] Fingleton, B., Garretsen, H., & Martin, R. (2012). Recessionary shocks and regional employment: evidence on the resilience of U.K. regions, *Journal of regional science*, 52, 109-133.
- [28] Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockström, J. (2010). Resilience thinking: integrating resilience, adaptability and transformability, *Ecology and Society*, 15.

- [29] Guichard, S., & Rusticelli, E. (2010). Assessing the Impact of the Financial Crisis on Structural Unemployment in OECD Countries. OECD Economics Department Working Papers, No. 767, OECD Publishing. [http://www.oecd-ilibrary.org/economics/assessing-the-impact-of-the-financial-crisis-on-structural-unemployment-in-oecd-countries\\_5kmftp8khfig-en?crawler=true](http://www.oecd-ilibrary.org/economics/assessing-the-impact-of-the-financial-crisis-on-structural-unemployment-in-oecd-countries_5kmftp8khfig-en?crawler=true). Accessed 26 February 2016.
- [30] Hill, E., Clair, T., Wial, H., Wolman, H., Atkins, P., Blumenthal, P., Ficenc, S., & Friedhoff, A. (2011). Economic Shocks and Regional Economic Resilience, working paper 2011-03, Institute of Urban and Regional Development, Berkeley. [http://brr.berkeley.edu/brr\\_workingpapers/2011-03-hill\\_et\\_al-conference\\_economic\\_shocks\\_regional\\_economic\\_resilience.pdf](http://brr.berkeley.edu/brr_workingpapers/2011-03-hill_et_al-conference_economic_shocks_regional_economic_resilience.pdf). Accessed 26 February 2016.
- [31] Kahsai, M.S., Yu, J., Middleton, M., Schaeffer, P.V., & Jackson, R.W. (2015). Regional Research Institute West Virginia University. An Application to West Virginia, Working Paper Number 2015-03. [http://rri.wvu.edu/wp-content/uploads/2012/11/WP\\_CERI.pdf](http://rri.wvu.edu/wp-content/uploads/2012/11/WP_CERI.pdf). Accessed 26 February 2016.
- [32] Lallement, M. (2011). Europe and the economic crisis: forms of labour market adjustment and varieties of capitalism, *Work, employment and society*, 25, 627–641.
- [33] Lisnyak, S. (2015). Literature review regarding the concept of resilience and its assessment in the context of the economic dimension, CES Working Papers, issue: 2A, 511-518.
- [34] Lungová, M. (2013). The resilience of regions to economic shocks. <https://dspace.tul.cz/bitstream/handle/15240/6932/38%20363.pdf?sequence=1>. Accessed 26 February 2016.
- [35] Marelli, E., Patuelli, R., & Signorelli, M. (2012a). Regional unemployment in the EU before and after the global crisis, *Post-Communist Economies*, 24, 155–175.
- [36] Marelli, E., Signorelli, M., & Tyrowicz, J. (2012b). Crises and joint employment-productivity dynamics: A comparative perspective for European countries, *Comparative Economic Studies*, 54(2), 361–394.
- [37] Martin, R. (2012). Regional Economic Resilience, Hysteresis and Recessional Shocks, *Journal of Economic Geography*, 12, 1-32. doi: 10.1093/jeg/lbr019
- [38] Martin, R., & Sunley, P. (2014). On the Notion of Regional Economic Resilience: Conceptualisation and Explanation, *Journal of Economic Geography*, 15, 1-42. doi: 10.1093/jeg/lbu015
- [39] Miguélez, F. & Prieto, C. (2009). Transformaciones del empleo, flexibilidad y relaciones laborales en Europa, *Política y Sociedad*, 46, 275-287.
- [40] Murias, P., Martínez-Roget, F., Novello, S., & Estévez-Núñez, J.C. (2012). Resiliencia y mercados de trabajo locales: municipios españoles frente a la crisis, International Conference on Regional Science the challenge of regional development in a world of changing hegemonies: knowledge, competitiveness and austerity, XXXVIII Reunión de Estudios Regionales- AECR. <http://www.aecr.org/web/congresos/2012/Bilbao2012/htdocs/pdf/p380.pdf>. Accessed 26 February 2016.
- [41] OECD (2010). OECD Employment Outlook 2010, Paris, OECD Publishing. <http://www.oecd.org/employment/emp/48806664.pdf>. Accessed 26 February 2016.
- [42] OECD (2012). OECD Employment Outlook 2012, Paris, OECD Publishing. <http://www.oecdilibrary.org/docserver/download/8112011e.pdf?expires=1456418624&id=id&accname=ocid194660b&checksum=D9FAF4A3A7166CB65BCFEF312093F13F>. Accessed 26 February 2016.
- [43] Pendall, R., Foster, K., & Cowell, M. (2010). Resilience and regions: building understanding of the metaphor, *Cambridge Journal of Regions, Economy and Society*, 3, 71–84. doi:10.1093/cjres/rsp028
- [44] R Core Team (2015) R: A language and environment for statistical computing, R Foundation for Statistical Computing, Vienna, Austria. <http://www.R-project.org/>. Accessed 26 February 2016.
- [45] Ragin, C. (1987). *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*. Berkeley: University of California Press.
- [46] Ragin, C. (2006). Set relations in social research: Evaluating their consistency and coverage, *Political Analysis*, 14, 291–310.
- [47] Rose, A. (2009). Economic Resilience to Disasters, CARRI Research Report 8. [http://www.resilientus.org/wpcontent/uploads/2013/03/Research\\_Report\\_8\\_Rose\\_1258138606.pdf](http://www.resilientus.org/wpcontent/uploads/2013/03/Research_Report_8_Rose_1258138606.pdf). Accessed 26 February 2016.
- [48] Sánchez, A. (2009). Crisis y empleo: del mercado de trabajo al modelo económico. *Revista Trabajo Universidad de Huelva*, 22, 17-46.

- [49] Schneider, C., & Wagemann, C. (2012). *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis (QCA)*. Cambridge: Cambridge University Press.
- [50] Simmie, J., & Martin, R. (2010). The economic resilience of regions: towards an evolutionary approach, *Cambridge Journal of Regions, Economy and Society*, 3, 27–43. doi:10.1093/cjres/rsp029
- [51] Svoboda, O., & Mašťálka, M. (2013). The resilience of Czech regions to economic crisis, XVI. mezinárodní kolokvium o regionálních vědách. Retrieved from: [https://is.muni.cz/do/econ/soubory/katedry/kres/4884317/41725568/62\\_2013.pdf](https://is.muni.cz/do/econ/soubory/katedry/kres/4884317/41725568/62_2013.pdf). Accessed 26 February 2016.
- [52] Thiem, A., & Duşa, A. (2013). Boolean Minimization in Social Science Research: A Review of Current Software for Qualitative Comparative Analysis (QCA), *Social Science Computer Review*, 31, 505-21.
- [53] Tridico, P. (2013). The impact of the economic crisis on EU labour markets: A comparative perspective, *International Labour Review*, 152, 175-190.
- [54] Tsai, C., Wilson, P.N., & Rahman, T. (2015). Economic Resilience and Vulnerability in the Rural West, University of Arizona, Department of Agricultural and Resource Economics, Working Papers. <http://purl.umn.edu/202969>. Accessed 26 February 2016.
- [55] Vaughan-Whitehead, D. (2011). The effects of the crisis on work inequalities in Europe. Research Conference on Key Lessons from the Crisis and Way Forward. [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/genericdocument/wcms\\_192381.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/genericdocument/wcms_192381.pdf). Accessed 26 February 2016.
- [56] Verick, S. (2009). Who is Hit Hardest During a Financial Crisis? The Vulnerability of Young Men and Women to Unemployment in and Economic Downturn. Institute for the Study of Labor (IZA) Discussion Paper No. 4359. <http://ftp.iza.org/dp4359.pdf>. Accessed 26 February 2016.
- [57] Walker, B., Gunderson, L., Kinzig, A., Folke, C., Carpenter, S., & Schultz, L. (2006). A handful of heuristics and some propositions for understanding resilience in social-ecological systems, *Ecology and Society*, 11, 13.
- [58] Woodside, A., & de Villiers, R. (2011). Improving Research on Thinking and Deciding by Executives, *2011 4th international conference of education, research and innovation (iceri)*, p. 71.
- [59] Acknowledgement
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## Conflict of Interest

The authors declare that they have no conflict of interest.

## Tables

**Table 1: Description of the conditions**

	Description	Indicator
RES Labour resilience	Difference in the employment rate between 2007 and 2010.	Eurostat-Labour Force Survey-LFS (lfsa_ergan)
FLEX Flexibility	Quantitative measure that considers various aspects of the legal and regulatory framework of a country's labour market, including regulations concerning minimum wages, laws inhibiting layoffs, severance requirements, and measurable regulatory restraints on hiring and hours worked.	CESifo Group (Labour Freedom-Index of Economic Freedom)
EDU Educational level	Population with upper secondary or tertiary education attainment. ISCED11 Upper secondary, post-secondary non-tertiary and tertiary education (levels 3-8). People from 15 to 64 years old.	Eurostat-Education and training (edat_lfse_08)
LMP	Data on expenditure cover the direct costs of total LMP	Eurostat-Labour Force Survey-

Labour Market Policies	intervention (categories 2-7) as percentage of gross domestic product (GDP) including the following actions: training, employment incentives, supported employment and rehabilitation, direct job creation and start-up incentives.	LFS (Imp_expsumm)
TEMCYC Cyclic temporary work	The proportion of workers with temporary employment in manufacturing and construction workers in total temporary employment.	Eurostat-Labour Force Survey-LFS (lfsa_etgana)

Source: Own elaboration

**Table 2: The truth table for the resilient cases**

EDU07	FLEX07	LMPLMP07	TEMCYC07	OUT	n	incl	cases
1	1	1	1	1	2	1,00	Austria,Poland
1	0	1	1	1	1	1,00	Germany
0	0	0	1	0	2	0,50	Portugal,Romania
0	0	1	0	0	3	0,33	France,Luxembourg,Norway
0	1	1	0	0	4	0,00	Belgium,Denmark,Ireland,Netherlands
1	0	0	1	0	3	0,00	Czech Republic,Estonia,Slovenia
1	1	0	1	0	3	0,00	Latvia,Hungary,Slovakia
1	1	0	0	0	2	0,00	Bulgaria,United Kingdom
0	0	0	0	0	1	0,00	Greece
0	0	1	1	0	1	0,00	Spain
0	1	0	1	0	1	0,00	Italy
1	0	1	0	0	1	0,00	Finland
1	1	1	0	0	1	0,00	Sweden

**Table 3: Analysis of sufficient conditions for the labour resilience: parsimonious solution**

Causal configuration	Consistency	Raw coverage	Unique coverage
EDU07 * LMP07 * TEMCYC07	1.00	0.60	-
Solution consistency: 1.00			
Solution coverage: 0.60			

**Table 4: The truth table for the not resilient cases**

EDU07	FLEX07	LMP07	TEMCYC07	OUT	n	incl	cases
0	1	1	0	1	4	1,00	Belgium,Denmark,Ireland,Netherlands
1	0	0	1	1	3	1,00	Czech Republic,Estonia,Slovenia
1	1	0	1	1	3	1,00	Latvia,Hungary,Slovakia
1	1	0	0	1	2	1,00	Bulgaria,United Kingdom
0	0	0	0	1	1	1,00	Greece
0	0	1	1	1	1	1,00	Spain
0	1	0	1	1	1	1,00	Italy
1	0	1	0	1	1	1,00	Finland
1	1	1	0	1	1	1,00	Sweden
0	0	1	0	0	3	0,67	France,Luxembourg,Norway
0	0	0	1	0	2	0,50	Portugal,Romania
1	1	1	1	0	2	0,00	Austria,Poland
1	0	1	1	0	1	0,00	Germany

**Table 5: Analysis of sufficient conditions for the absence of resilience: parsimonious solution**

Causal configuration	Consistency	Raw coverage	Unique coverage
~LMP07 * ~TEMCYC07	1.00	0.15	0.05
EDU07 * ~LMP07	1.00	0.40	0.30
~EDU07 * FLEX07	1.00	0.25	0.25
EDU07 * ~TEMCYC07	1.00	0.20	0.10
~EDU07 * LMP07 * TEMCYC07	1.00	0.05	0.05
Solution consistency: 1.00			
Solution coverage: 0.85			

## Sharing Economy: The Establishment of Organizational Identity Overtime, Considering Identify Claims and Legitimacy Granting

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### Abstract

The Sharing Economy (SE) has been growing at an impressive rate across the globe (Cohen & Kietzmann, 2014) and emerging as an innovative and rapidly growing sector of the economy (Hira & Reilly, 2017), which attracted the attention of the scientific community. An increasing number of studies have been brought to light helping to document and analyze how SE manifests and evolves across economic systems, thus, contributing to refine and recast existing management theory (Mair & Reischauer, 2017). Nevertheless, there still is a lack of a common understanding of SE and its underlying mechanisms (Knote & Blohm, 2016). As an emergent category, SE has been contoured by being a mutant process, as it has been crafted by multiple and distinct temporal identity and legitimacy events, mechanisms and claims. Showing signs of being an on-going process of evolution, there is a constant need for further research to identify developments in the evolution of SE considering both identify claims (self-referential) and legitimacy (granted by stakeholders), which would offer additional comprehension about the SE phenomenon. The research addresses it by studying *what is the role of SE in establishing the identity of organizations belonging to the field, considering both identify claims (self-referential) and legitimacy (granted by stakeholders)?* To answer the research question, the research was designed involving two components inspired on category creation studies (Durand & Paoletta, 2013; Glynn & Navis, 2013; Navis & Glynn, 2010; Kennedy & Fiss, 2013; Kennedy et al., 2010; Lounsbury & Rao, 2004; and Wry et al., 2014): 1) four prototypical SE organizations were selected, each of them belonging to Schor's (2014) four SE archetypes of activities: (i) *Airbnb* – peer-to-peer, for-profit activity –, (ii) *Zipcar* – business-to-peer, for-profit activity –, (iii) *TimeBanks* – peer-to-peer, non-profit – and (iv) *Make: makerspaces* – business-to-peer, non-profit. The content of the evolution of their identity claims was analyzed, using data from their public available reports, as well as, other secondary data available on-line; and 2) considering the same set of SE organizations, legitimacy evolution was analyzed considering how scientific community, investors, customers, media, other analysts and other interested audiences have been constructing category meaning to them, conferring the formation of SE categorial and organizational identities, and perceptions about the viability of their business models (Tripsas, 2009, as cited in Navis & Glynn, 2010). In short, it was analyzed how stakeholders assess the viability of SE categories and organizations and can grant or withhold legitimacy to SE organizations (Zuckerman, 1999, as cited in Navis & Glynn, 2010). This research presents a new layer on framing a detailed understanding of the SE field in its maturing dimension, thus, meeting Mair's and Reischauer's (2017) call for studying the SE, unpack and make sense of an inspiring and complex phenomenon and thereby advancing and sophisticate the existing theory.

**Keywords:** *Sharing Economy; Identity Claims; Legitimacy Granting; Prototypical Organizations; Stakeholders.*

### Introduction

The *Sharing Economy* has been having a great boost and attracting great attention over the last few years from a vast variety of stakeholders. Along the process, it has been evaluated as (i) having a huge potential for creating new businesses and services that may allocate value more fairly bringing people together in new ways (Schor, 2014), (ii) involving millions

or even billions of participants and (iii) capitalizing the existing assets while providing spillover effects in the economy (Bonciu & Bălgar, 2016).

This research main objective is to study how has the establishment of SE organizational identities been evolving overtime, considering identify claims and legitimacy granting.

### The Theoretical-Conceptual Framework

The *Sharing Economy* (SE) is a relatively new phenomenon by way of technology standards (Zifkin, 2015), born of the Internet age (Belk, 2014), and in which you are not helping a friend for free but rather providing SE services to a stranger for money (Sundararajan, 2016). The commercial sharing services or “prototypical actors and practices” (Navis et al., 2012, p. 26) of SE allow people share resources in creative, new ways (Cohen & Kietzmann, 2014). It’s a new form of sweating underutilized assets, by building communities around them and turning consumers into providers (Varsavsky, cited in Silver, 2013). Its participants are being labeled as *digital matching firms* (ESA, 2016) and the sector is perceived to contour four main characteristics (Penn & Wihbey, 2016): (a) they use information technology (IT systems) facilitate peer-to-peer transactions; (b) they rely on user-based rating systems for quality control; (c) they offer the workers who provide services via digital matching platforms flexibility in deciding their typical working hours; (d) to the extent that tools and assets are necessary to provide a service, digital matching firms rely on the workers using their own. It also has been seen by some as a label to broadly define the emergent ecosystem that is upending mature business models across the globe, while analysts argue that no single label can neatly encapsulate this movement, as for some the word “sharing” was a misnomer, a savvy-but-disingenuous spin on an industry they felt was more about monetary opportunism than altruism, while for others, more appropriate titles included the *Trust Economy*, *Collaborative Consumption*, the *On-Demand* or *Peer-to-Peer Economy* (PwC, 2015). These developments have started to challenge traditional thinking about how resources can and should be offered and consumed, supporting arguments that incremental improvements in our existing production and consumption systems are insufficient to transform our global economy toward sustainability (Lovins & Cohen, 2011; Stead & Stead, 2013).

As we see, SE has a novelty dimension associated with it, in the sense that it is an emergent category. Thus, it should be studied as an important phenomenon influencing the establishment of organizational identity and legitimacy in both for-profit and non-profit businesses/activities. We, therefore, propose a new layer of research on SE that gives light to its category construction, emphasizing the establishment of organizational identity overtime, considering both identify claims and legitimacy granting. This follows below.

The process of categorization has not only a component of “straightjacket” (in the sense of delimiting a particular practice to a narrow group of actors), but also a “generative” component of new identities, practices (Glynn & Navis, 2013). That is, when a new (supposed) category appears, it can also give an opportunity to open a range of new actors, entities and practices. We therefore have two dimensions in this discussion: in the genesis of “categorizing” something, there is both the need to define boundaries very well (who is and who cannot be within that category) as well as the almost intrinsic possibility (just like any other new and emerging process) of being the generator of new ideas, practices, prototypes and actors (the “creativity ingredient”). Further, the greater the uncertainty, the greater the sociocultural “pressure” to find a category for that entity, actor, practice or activity. That is, one of the factors/determinants for categorization is the so-called “sociocultural urgency in reducing identity uncertainty”.

Durand and Paoletta (2013), on the other hand, advocate that the process of categorizing / categorization goes beyond the classical prototype theory (Rosch & Mervis, 1975), also known as the model of categorical constraint, where there is a very disciplinary exercise with strict, rigid (like a straightjacket) classification of products/actors/industries depending on their perfect match with the key features of a given category prototype. The authors bring to light Redher’s (2003a, 2003b) causal model and Barsalou’s (1983) goal-derived categories (ad hoc categories) in justifying that categorizing also involves other mediating sub-variables, antecedents coming from external audiences: (i) “cognitive test of congruence” and (ii) “goal satisfying calculus”. In other words, audiences may legitimate a given product as being part of a particular category depending on situational circumstances, and not so much on general pre-conceived constructions of what a category is. Because of this, there may be multi-category memberships, hybrid organizations, which may be classified as being part of multi-categories and not just one. Audiences (consumers), thus, play a determinant part in such process. The process of categorization is much multifaceted with multi-variables. Thus, categories do involve a disciplinary exercise (Rosch’s and Mervis’ prototype theory), but also a cognitive test of congruence (Redher’s causal model theory), and a goal satisfying

calculus (Barsalou's goal-derived categories theory). In other words, when theorizing on categorization, one should consider the "integration of codes, causal associations, and goals".

Complementary, Kennedy and Fiss (2013) urge a research that focuses on how categories emerge and fall out of use and acquire meaning and relevance, arguing that research on categories should upstream study how categories emerge and fall out (dissolute). And to find answers to that, it must be taken into account two distinctive but complementary antecedent dimensions: (1) the occasions and motivations for invoking categories (similar to Durand's and Paoella's argument is that ad hoc and nascent categories occur when they facilitate goals or explain the causes of specific situations), and (2) their meaning and encompassing ontologies (that is: it involves studying the changing meaning of existing categories or of new categories that are emerging or failing to emerge, and it involves studying the implications for encompassing ontologies).

Kennedy et al. (2010), in turn, stress the importance in this discussion of what they call *category currency*. Meaning: category construction is a dynamic process, where audiences "buy" or "dismiss" certain emergent category ("alternatives for consideration") and, depending on these "exchanges" of category acceptance and rejection (or "the changing value of conformity"), category construction takes form. Figure1 below, illustrates how category meaning is an ongoing/dynamic construction. There are eight possible ways/paths for changing category meaning.

Figure 1 – Eight Ways Category Meaning Can Change

Focal Categories (Time 1)		Alternatives for Consideration (Time 2)	
		1	2+
1		1. Redefinition 	2. Subdivision 
			3. Subtraction 
2		4. Subsumption 	5. Substitution 
3+		6. Recombination 	7. Conglomeration 
			8. Incorporation 

- Notes:
1. Lower case letters denote labels for category abstractions; upper case letters denote named entities.
  2. A letter followed by an apostrophe denotes a new meaning for the label referred to by the letter.

Source: Kennedy et al., 2010.

The discussion on categorization should also take into account Lounsbury's and Rao's (2004) contribution. The authors bring forward a new layer on the topic by introducing a new line of research, a new factor for category construction, durability, change and reconstruction: Political Power (from powerful producers) – "product categories are products of practical politics" (p. 991). Focusing on the role of industry media in institutional change, the authors argue that "industry media are not passive observers but important actors that promote stability by maintaining existing categories or creating new product categories from existing product categories so as to preserve comparability among firms (p. 972)". Moreover,

they argue that “product categorization is importantly shaped by the politics of markets (...) and when powerful producers dominate a category, they can counteract the effects of performance variability and the influx of new entrants and encourage industry media to preserve the existing structure of categories” (p. 972). The authors’ study suggests that “changes in product categories are not driven merely by technical processes but are fundamentally shaped by the politics of markets (...) product categories are fragile cognitive structures that can be brought down when there is high performance variability and new entrants embody variations and disturb the status quo” (p. 990). Categories are, therefore, just an outcome (like an interface) of the interplay of interests among industry media and producers. In this sense, “producers may pressure editors to locate them in product categories in which they look better (...) and cultural constructions such as product categories are implicated in a system of power” (p. 991-992).

The dimension of *hybridization* (Wry et al., 2014) should also be discussed. That is: organizations that span mix elements of multiple categories. “The category a firm starts in, how it hybridizes, and the degree to which this affects core versus peripheral identity markers may all affect how it is perceived” (p. 1309). Hybridization, thus, may not necessarily be negative (“overlooked” or “devalued”), but rather, organizations having mixed elements of multiple categories may generate positive reactions from external audiences.

Another component intrinsically associated with the process of categorization is *legitimation*. That is, how stakeholders confer the formation of categorical and organizational identities, and perceptions about the viability of their business models. Being a complex social process (Fligstein, 1997; Kennedy, 2008; Kennedy, Lo, and Lounsbury, 2010, cited in Navis and Glynn, 2010), it involves both entrepreneurial organizations and prospective resource providers, such as investors, analysts, customers, media, and other interested audiences, in the social construction of a market category’s meaning, the formation of categorical and organizational identities, and perceptions about the viability of the business model (Tripsas, 2009, cited in Navis & Glynn, 2010). Legitimizing a new (market) category, on the other hand, involves consumers, industry analysts, stock market investors, or other audiences (Meyer and Rowan, 1977; DiMaggio and Powell, 1983, cited in Navis & Glynn, 2010) whose interests transcend individual organizations (Suchman, 1995, cited in Navis & Glynn, 2010). Thus, it becomes critical to study the influence/role of audiences as they assess the viability of categories and organizations and can grant or withhold legitimacy (Zuckerman, 1999, cited in Navis & Glynn, 2010). Also, with respect to the discussion around the SE, it becomes of particular importance to take into account how organizational identity affects audiences’ evaluation of organizational performance, as Smith’s (2011) study reveals that investors, for instance, are more likely to “allocate capital more readily to nonconforming hedge funds following periods of short-term positive performance”. The more atypical a given organization is, the more likelihood of audiences to positively to respond to it and, thus, grant it legitimacy, which on the other hand, provides a distinct competitive advantage for that non-conforming organization. For the purposes of the present study, it becomes, therefore, important to understand how SE atypical organizations/entities have been assessed by audiences and stakeholders.

The legitimation of a new category, complementarily, depends on certain key determinants (Navis & Glynn, 2010; Aldrich & Fiol, 1994): (i) *Sameness (or Close Substitution)* – a new category exists when two or more products or services are perceived to be of the same type or close substitutes for each other in satisfying market demand; (ii) *Distinctiveness* – not all members are equivalent in the category; (iii) *Credibility* – given by actors external to the category, i.e., the interested audiences who judge its feasibility, credibility and appropriateness; (iv) *Cognitive legitimation* – relates to the level of public knowledge about a new activity (the highest form of cognitive legitimation is achieved when a new product, process, or service is taken for granted); (v) *Sociopolitical legitimation* – relates to the process by which key stakeholders, the general public, key opinion leaders, or governmental officials accept a venture as appropriate and right, given existing norms and laws. (the public acceptance of an industry, government subsidies to the industry, or the public prestige of its leaders).

In terms of the SE, and bearing in mind the determinants of *Sameness (or Close Substitution)* and *Distinctiveness*, Schor (2014) describes a number of services that are perceived to be of the same type in satisfying market demand that may be grouped together as members of the same category. She calls this as “four main types of SE activities”. Below follows figure 2, which pinpoints SE activities according to the shared sameness with other category members and the individual distinctiveness from other members.

Figure 2 – Archetypes of sharing economy activities

		Type of Provider	
		Peer to Peer	Business to Peer
Platform Orientation	Non-Profit	Food Swaps TimeBanks	Makerspaces
	For-Profit	Relay Rides (transportation) Airbnb (accommodation) Uber (transportation)	Zipcar (transportation)

Source: Schor, 2014.

**Methodology**

*The Methods Used to Gather Data*

Bearing in mind the theoretical background exposed above, we pose the following Research Question and elaborate the respective Research Design:

Research Question (RQ): What is the role of SE in establishing the identity of organizations belonging to the field, considering both identify claims (self-referential) and legitimacy (granted by stakeholders, namely scientific community, investors, analysts, customers, media, and other interested audiences)? Is SE constraining the identity claims for the stake of legitimacy granting, or is SE acting as a general ambiguous category enabling divergence in identities and business models?

Research Design: this RQ was answered by a design involving two components inspired on category creation studies (Durand & Paoletta, 2013; Glynn & Navis, 2013; Navis & Glynn, 2010; Kennedy & Fiss, 2013; Kennedy et al., 2010; Lounsbury & Rao, 2004; and Wry et al., 2014): 1) four prototypical SE organizations were selected, each of them belonging to Schor’s (2014) four SE archetypes of activities. Respectively: (i) *Airbnb* – peer-to-peer, for-profit activity –, (ii) *Zipcar* – business-to-peer, for-profit activity –, (iii) *TimeBanks* – peer-to-peer, non-profit – and (iv) *Make: makerspaces* – business-to-peer, non-profit. The evolution of their identity claims were content analyzed, using data from their publically available reports, as well as, other secondary data available on-line; and 2) considering the same set of SE organizations, legitimacy evolution was analyzed considering how scientific community, investors, analysts, customers, media, and other interested audiences have been constructing category meaning to them, conferring the formation of SE categorical and organizational identities, and perceptions about the viability of their business models (Tripsas, 2009, as cited in Navis & Glynn, 2010). In short, it was analyzed how audiences assess the viability of SE categories and organizations and can grant or withhold legitimacy to SE organizations (Zuckerman, 1999, as cited in Navis & Glynn, 2010).

**Results**

*Evolution of Identity Claims (self-referential) of Prototypical SE Organizations*

Table 1 below presents the results in a concise timeline of the key events related with the evolution of identity claims (self-referential) of four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 1 – Evolution of Identity Claims (self-referential) of Prototypical SE Organizations

Evolution of Identity Claims (self-referential) of Prototypical SE Organizations		
Prototypical Organization	Archtype of SE activity	Milestone Facts & Events
	Peer-to-peer For-profit 	<b>FALL 2007</b> Brian Chesky and Joe Gebbia host the first guests of Airbedandbreakfast.com to make rent money.

(continuation of  
table 1)Peer-to-peer  
For-profit**MARCH 2008**

Airbed & Breakfast officially launches during SXSW 2008 and makes two bookings.

**EARLY AUGUST 2008**

The formal Airbed & Breakfast website launches for the Democratic National Convention to offer a solution for hotel room shortages and makes 80 bookings.

**AUGUST 25-28, 2008**

The Democratic National Convention in Denver.

**FALL 2008**

Chesky and Gebbia come up with the idea for Obama O's and Cap'n McCain's and sell \$30K worth.

**MARCH 2009**

Airbed & Breakfast changes its name to Airbnb and expands beyond just rooms to apartments, houses, and vacation rentals.

**SEPTEMBER 2009**

First International meetup in Paris.

**NOVEMBER 2010**

Airbnb launches the iPhone app and Instant Book feature.

**SUMMER 2011**

Airbnb begins international expansion with opening of German office.

**MAY 2012**

Airbnb introduces the \$1M Host Guarantee.

**JUNE 2012**

Airbnb launches the Wish Lists feature.

**NOVEMBER 7, 2012**

Airbnb offers free listings for Hurricane Sandy in partnership with the city of New York - the official launch of the Disaster Relief tool.

**SUMMER 2013**

Airbnb moves headquarters to 888 Brannan San Francisco.

**JUNE 2014**

Airbnb hosts more than 100,000 guests during the Rio World Cup.

**JULY 2014**

Airbnb launches rebranding and introduces the Belo.

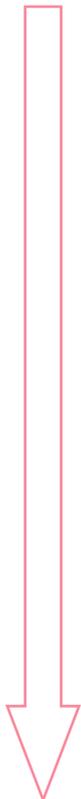
**NOVEMBER 21-23, 2014**

Airbnb Open in San Francisco - 1,500 hosts attend.

**MARCH 27, 2015**

Airbnb becomes the official alternative accommodation services supplier for 2016 Rio Olympic Games.

(continuation of table 1)	Peer-to-peer For-profit	<p><b><u>APRIL 7, 2015</u></b> Airbnb launches in Cuba.</p>
		<p><b><u>MAY 25, 2015</u></b> The White House appoints Brian Chesky as Presidential Ambassador for Global Entrepreneurship.</p>
		<p><b><u>NOVEMBER 12-14, 2015</u></b> Airbnb welcomes 6,000 hosts at the Airbnb Open in Paris.</p>
		<p><b><u>NOVEMBER 17-19, 2016</u></b> At the Airbnb Open in LA, Airbnb announces the launch of Trips and welcomes 7,000 attendees from over 100 countries.</p>
		<p><b><u>FEBRUARY 5, 2017</u></b> Airbnb launches the #weaccept campaign in response to the refugee ban.</p>
		<p><b><u>MARCH 2017</u></b> Airbnb executives travel the globe meeting with the host community and world leaders to expand Trips to 20 more cities.</p>
		<p><b><u>MARCH 21, 2017</u></b> Airbnb launches their Chinese brand, Aibiyong.</p>
		<p><b><u>AS PER TODAY, AUGUST 3, 2017</u></b> Airbnb stresses its identity claims in its website, by self-referring itself as: "Founded in August of 2008 and based in San Francisco, California, Airbnb is a trusted community marketplace for people to list, discover, and book unique accommodations around the world — online or from a mobile phone or tablet"; "Whether an apartment for a night, a castle for a week, or a villa for a month, Airbnb connects people to unique travel experiences, at any price point, in more than 65,000 cities and 191 countries. And with world-class customer service and a growing community of users, Airbnb is the easiest way for people to monetize their extra space and showcase it to an audience of millions".</p>



Prototypical Organization	Archetype of SE activity	Milestone Facts & Events
	Business-to-peer For-profit	<p><b><u>1999</u></b> Antje Danielson and Robin Chase conceive the idea for Zipcar.</p>
		<p><b><u>2000</u></b> The first Zipcar logo; JUNE: The first Zipcars debut on the streets of Boston and Cambridge.</p>
		<p><b><u>SEPTEMBER 2001</u></b> Zipcar arrives in Washington D.C.</p>
		<p><b><u>FEBRUARY 2002</u></b> Zipcar arrives in New York city.</p>
		<p><b><u>2003</u></b> The second Zipcar logo; JANUARY: Zipcar reaches 5,000 users.</p>



(continuation of  
table 1)Business-to-peer  
For-profit**2004**

The third Zipcar logo;  
APRIL: Launch of Zipcar for Business (to help companies get their innovative ideas off the ground);  
AUGUST: The first out-of-city campus opens at Wellesley College.

**2006**

APRIL: Zipcar reaches 50,000 users;  
MAY: Zipcar arrives in Toronto and Ontario, Canada;  
NOVEMBER: Zipcar opens a London office as part of a European expansion effort.

**OCTOBER 2007**

Zipcar merges with Seattle-based rival Flexcar, with the resulting company retaining the name and Cambridge headquarters of Zipcar.

**SEPTEMBER 2008**

Zipcar reaches 5,000 "Zipcars".

**JUNE 2009**

The Zipcar iPhone app is announced at the Apple Worldwide Developer Conference.

**APRIL 2010**

Zipcar buys Streetcar, the largest British car-sharing company, for about \$50 million.

**DECEMBER 2010**

In a venture funding round, Zipcar raises \$21 million from Meritech Capital Partners and Pinnacle Ventures.

**APRIL 2011**

Zipcar goes public, earning a market valuation of more than \$1 billion;  
Zipcar reaches 500,000 users.

**2012**

MARCH: Zipcar debuts at airports: JFK, Newark and LaGuardia;  
MAY: Zipcar reaches 10,000 "Zipcars";  
JULY: Zipcar expands its European presence;  
NOVEMBER: Zipcar has 767,000 members, more than 700 employees and 11,000 cars available in the U.S., Canada and Europe.

**2013**

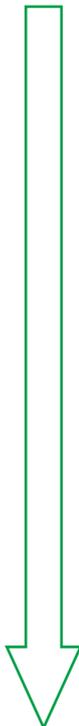
JANUARY: Avis Budget Group announces its intent to buy Zipcar. It will operate as an Avis subsidiary.  
OCTOBER: Zipcar launches its first TV commercial airs;  
DECEMBER: Zipcar launches their Blog (Ziptopia).

**2014**

MAY: ONE>WAY beta launches in Boston.  
JUNE: Zipcar reaches 900,000 users.

(continuation of table 1)

Business-to-peer For-profit



**2015**

OCTOBER: Zipcar is live in more places and more people than ever: 500+ cities and towns, 500+ universities, 50+ airports;  
 DECEMBER: Zipcar reaches an ecological footprint: its members reduced their CO2 emissions by over 1.5 billion pounds in 2015.

**NOVEMBER 8, 2016**

Zipcar gives away free car rentals on American Election Day to encourage its members to vote;  
 A Zipcar is reserved every 6 seconds.

**AS PER TODAY, AUGUST 3, 2017**

Zipcar stresses its identity claims in its website, by self-referring itself as:  
 “We’ve been around since 1999. That was before Wikipedia, the Razr phone, and the iPod. Whoa. With 15 years of collaboration and innovation under our (seat) belts, we’re working to make cities better places to live.”  
 “It’s been more than a decade since our founders sat in a café and decided to bring the European car-sharing idea to North America. Once the wheels were in motion, it was only a matter of time before some major changes helped grow a little car-sharing company into the world’s leading car-sharing network. Today, thanks to cool technology, a member-driven user experience, and an amazing team of hands-on car sharing enthusiasts, we are redefining the way this generation thinks about alternative transportation”;  
 “We’re not horn tooters, more like ambassadors for change. Zipcar isn’t just about the concept of car sharing; it’s about the people who make it a reality: a team that works hard, members who believe, and organizations that are making conscious decisions for the future. We’re gonna keep doing what we’re doing, looking for ways to make car sharing easier, faster, and better. We’re not trying to rule the world, just trying to give regular people – young and old, business types and family types – the freedom to live life”.

Prototypical Organization

Archetype of SE activity

Milestone Facts & Events



TimeBanks

Peer-to-peer Non-profit



**1980 (VERY EARLY DAYS)**

Dr. Edgar S. Cahn creates TimeBanking as a medium of exchange that would act as a way to encourage and reward the work needed to build strong, resilient communities.

**1981 (STILL VERY EARLY DAYS)**

Grace Hill Settlement House in St. Louis, MO became the first organization to use TimeBanking.

**1995**

TimeBanks USA (TBUSA), a registered 501c3 headquartered in Washington D.C., was formed by Dr. Edgar Cahn to expand the knowledge and field of timebanking and its impact on individuals, youth, families, communities, the environment, and the world.

(continuation of table 1)

Peer-to-peer Non-profit



TimeBanks



**1995 - 2017**

TBUSA has fostered the spread of TimeBanking by providing presentations, courses, manuals, guide-books and materials, workshops, conferences, strategic planning, and mentoring for communities and organizations at grass-roots, professional, academic and policy levels;

The TimeBanking movement is spreading across the United States and internationally. It now includes a network of 200+ independent TimeBanks in the United States. 32+ countries have active TimeBanks.

**AS PER TODAY, AUGUST 3, 2017**

*TimeBanks* stresses its identity claims in its website, by self-referring itself as:

“Timebanking is a time-based currency that helps to build circles and network of mutual support. With timebanking, you give one hour of service to another, and receive one time credit. An hour is always an hour (regardless of the service offered). You can use the credits in turn to receive services — or you can donate them to others”;

“Timebanks can be local, regional, national or international in scope. They can vary in size from as few as 20 people to tens of thousands. Most (but not all) timebanks use timebanking software, which helps them keep track of member activity”.

Prototypical Organization

Architype of SE activity

Milestone Facts & Events

Business-to-peer Non-profit



**2005**

Having one of its roots in MIT’s Fab Labs (Burke, 2014, as cited in Davis, 2017), the makerspace movement has its first milestone foundation pillar with the launch of *Make: magazine* with the use of the word “Maker” to name the community.

**2006**

A further catalyst for the surge of the maker movement was the Launch of *Maker Faires*. The first was held in 2006 in the San Francisco Bay Area.

**2016**

There were nearly 200 *Maker Faire* around the world with four of the events drawing at or above 100,000 people in San Mateo, New York, Rome and Shenzhen.

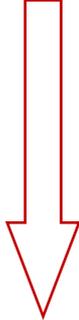
**2005-2017**

During this period, *Make:* has been published bi-monthly in print and featuring dozens of DIY technology projects.

(continuation of table 1)

Business-to-peer  
Non-profit

**Make:**  
makerspaces



**AS PER TODAY, AUGUST 3, 2017**

Make: makerspaces stresses its identity claims in its website, by self-referring itself as: "Makerspaces represent the democratization of design, engineering, fabrication, and education"; "To describe them simply, makerspaces are community centers with tools. Makerspaces combine manufacturing equipment, community, and education for the purposes of enabling community members to design, prototype and create manufactured works that wouldn't be possible to create with the resources available to individuals working alone"; "These spaces can take the form of loosely-organized individuals sharing space and tools, for-profit companies, non-profit corporations, organizations affiliated with or hosted within schools, universities or libraries, and more. All are united in the purpose of providing access to equipment, community, and education, and all are unique in exactly how they are arranged to fit the purposes of the community they serve".

Source: Airbnb, 2017; Zipcar, 2017a; Zipcar, 2017b; Eha, 2013; Kaufman, 2016; TimeBanks, 2017; Make: makerspaces, 2017; Davis, 2017.

*Evolution of Legitimacy Granting by Stakeholders, External Actors, Interested Audiences*

*Scientific Community*

Table 2 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by the scientific community to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 2 – Evolution of Legitimacy Granting by Scientific Community

Evolution of Legitimacy Granting by Scientific Community		
STAKEHOLDER	PROTOTYPICAL ORGANIZATIONS	STAKEHOLDER
Scientific Community		Scientific Community
<i>Date</i>	 EVENTS → <i>considering legitimacy granting as a whole to their field of action</i>	<i>Nature of Legitimacy Granting</i>
Two of these four prototypical organizations are founded before any scientific studies related to their field of action:		
	1995 Official launch of 	2000 Official launch of 

<i>(continuation of table 2)</i>			
<b>2002</b>	Benkler	Introduction of the concept “commons-based peer production”.	Very early days of <i>Cognitive Legitimation.</i>
<p><b>2005</b> Official launch of</p> 			
<b>2005</b>	Bauwens	Publication of an essay “The Political Economy of Peer Production”.	Very early days of <i>Cognitive Legitimation.</i>
<b>2008</b>	Lessig	Introduction of the term “Sharing Economy”.	Very early days of <i>Cognitive Legitimation.</i>
<p><b>2008</b> Official launch of</p> 			
<b>2010</b>	Botsman & Rogers	Publication of Book “What’s mine is yours: The rise of the Collaborative Consumption”. Introduction of the term “collaborative consumption”.	Early days of <i>Cognitive Legitimation;</i> <i>Credibility.</i>
<b>2012</b>	Bardhi & Eckhardt	Introduction of the expression: “access-based consumption”.	Early days of <i>Cognitive Legitimation;</i> <i>Credibility.</i>
<b>2013</b>	Owyang	Introduction of the concept “Collaborative Economy”.	<i>Cognitive Legitimation;</i> <i>Credibility.</i>
<b>2014</b>	Belk	The author criticizes Botsman’s & Rogers’ approach by defining collaborative consumption as “people coordinating the acquisition and distribution of a resource for a fee or other compensation”.	<i>Cognitive Legitimation;</i> <i>Credibility.</i>

(continuation of table 2)

<b>2014/2015</b>	Dubois, et al. (2014); Schor (2014, 2015); Schor & Fitzmaurice (2015); Schor et al. (2014)	Contribution in defining the SE. Introduction of the expression: "connected consumption".	<i>Cognitive Legitimation; Credibility.</i>
<b>2015</b>	Frenken et al.; Meelen & Frenken	Further contribution in defining the SE.	<i>Consolidation of Cognitive Legitimation; Credibility.</i>
<b>2015</b>	Hamari et al.	Introduction of an alternative definition of <i>Collaborative Consumption</i> : it's "a peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services".	<i>Consolidation of Cognitive Legitimation; Credibility.</i>
<b>2015</b>	Kim et al.	Publication of a study "Why people participate in the Sharing Economy: A Social Exchange Perspective".	<i>Cognitive Legitimation; Credibility.</i>
<b>2016</b>	Knote & Blohm	Publication of a study "Deconstructing the Sharing Economy: On the Relevance for IS Research".	<i>Cognitive Legitimation; Credibility.</i>
<b>2016</b>	Lee et al.	Publication of "A Study on Factors Influencing Consumers' Information Needs for Sharing Economy Service".	<i>Cognitive Legitimation; Credibility.</i>
<b>2016</b>	Cheng	Publication of "Sharing Economy: A review and agenda for future research".	<i>Consolidation of Cognitive Legitimation; Credibility; Sociopolitical Legitimation discussion.</i>
<b>2016</b>	Bonciu & Bâlgar	Publication of a study "Sharing Economy as a Contributor to Sustainable Growth. An EU Perspective".	<i>Consolidation of Cognitive Legitimation; Credibility; Sociopolitical Legitimation discussion.</i>

*(continuation of table 2)*

2017	Frenken & Schor	Publication of a study "Putting the sharing economy into perspective".	Consolidation of <i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation</i> discussion.
2017	Yang et al.	Publication of a study on "Why are customers loyal in sharing-economy services? A relational benefits perspective".	Consolidation of <i>Cognitive Legitimation; Credibility</i> .
2017	Mair & Reischauer	Publication of a study on "Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations".	Consolidation of <i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation</i> discussion.
2017	Muñoz & Cohen	Publication of a study on "Mapping out the sharing economy: A configurational approach to sharing business modelling".	<i>Sameness; Distinctiveness;</i> consolidation of <i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation</i> discussion.
2017	Bradley & Pargman	Publication of a study on "The sharing economy as the commons of the 21st century".	<i>Sameness; Distinctiveness;</i> consolidation of <i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation</i> discussion.
2017	Hira & Reilly	Publication of a study on "The Emergence of the Sharing Economy: Implications for Development".	<i>Sameness; Distinctiveness;</i> consolidation of <i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation</i> discussion.

Source: Airbnb, 2017; Zipcar, 2017a; Zipcar, 2017b; TimeBanks, 2017; Make: makerspaces, 2017; Benkler, 2002; Bauwens, 2005; Lessig, 2008; Botsman & Rogers, 2010; Bardhi & Eckhardt, 2012; Owyang, 2013; Belk, 2014; Dubois et al., 2014; Schor, 2014; Schor, 2015; Schor & Fitzmaurice, 2015; Schor et al., 2014; Frenken et al., 2015; Meelen & Frenken, 2015; Hamari et al., 2015; Kim et al., 2015; Knotte & Blohm, 2016; Lee et al., 2016; Cheng, 2016; Bonciu & Bălgar, 2016; Frenken & Schor, 2017; Yang et al., 2017; Mair & Reischauer, 2017; Muñoz & Cohen, 2017; Hira & Reilly, 2017; Bradley & Pargman, 2017.

## Investors

Table 3 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by investors to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 3 – Evolution of Legitimacy Granting by Investors

<i>Evolution of Legitimacy Granting by Investors</i>			
STAKEHOLDER		PROTOTYPICAL ORGANIZATIONS	STAKEHOLDER
↘ <i>Investors</i>		→ <i>EVENTS</i> → <i>considering individual legitimacy granting</i>	↙ <i>Investors</i>
<i>Date</i>	<i>Actor</i>	①  airbnb	<i>Nature of Legitimacy Granting</i>
<b>January 2009</b>	Y Combinator	Investment of \$20 thousand.	<i>Cognitive Legitimation; Credibility.</i>
<b>April 2009</b>	Sequoia Capital and Y Ventures	Investment of \$600 thousand.	<i>Cognitive Legitimation; Credibility.</i>
<b>November 2010</b>	Greylock Partners; Keith Rabois; Y Ventures; SV Angel; Elad Gil; Jeremy Stoppelman; Ashton Kutcher; Sequoia Capital	Investment of \$7.2 million.	<i>Cognitive Legitimation; Credibility.</i>
<b>July 2011</b>	CrunchFund; Ashton Kutcher; Jeff Bezos; General Catalyst; DST Global; Andreessen Horowitz; Oliver Jung; Sequoia Capital	Investment of \$112 million.	<i>Cognitive Legitimation; Credibility.</i>
<b>October 2013</b>	Ashton Kutcher; CrunchFund; Founders Fund; Sequoia Capital; Airbnb	Investment of \$200 million.	<i>Cognitive Legitimation; Credibility.</i>

*(continuation of table 3)*

<b>April 2014</b>	Dragoneer Investment Group; T. Rowe Price; TPG Growth; Sherpa Capital; Sequoia Capital; Andressen Horowitz	Investment of \$475 million.	<i>Cognitive Legitimation; Credibility.</i>
<b>June 2015</b>	Groupe Arnault; Horizons Ventures; Hillhouse Capital Group; General Atlantic; Tiger Global Management; Temasek Holdings; Kleiner Perkins Caufield & Byers; GGV Capital; China Broadband Capital; Wellington Management; Baillie Gifford; T. Rowe Price; Fidelity Investments; Sequoia Capital	Investment of \$1.5 billion.	<i>Cognitive Legitimation; Credibility.</i>
<b>November 2015</b>	FirstMark	Investment of \$100 million.	<i>Cognitive Legitimation; Credibility.</i>
<b>June 2016</b>	JP Morgan Chase & Co.; Citigroup; Morgan Stanley; Brand Capital	Investment of \$1 billion.	<i>Cognitive Legitimation; Credibility.</i>
<b>September 2016</b>	Altimeter Capital; Glade Brook Capital Partners; Geodesic Capital; TCV; CapitalG	Investment of \$555.46 million.	<i>Cognitive Legitimation; Credibility.</i>
<b>March 2017</b>	Jeff Jordan; Alfred Lin; TCV; CapitalG	Investment of \$447.8 million.	<i>Cognitive Legitimation; Credibility.</i>

(continuation of table 3)			
<i>Date</i>	<i>Actor</i>	② 	<i>Nature of Legitimacy Granting</i>
<b>December 2002</b>	Name of entity(ies) not available	\$4.7 million raised in a venture round (Series B).	<i>Cognitive Legitimacy; Credibility.</i>
<b>November 2003</b>	Boston Community Capital	Investment of \$2 million.	<i>Cognitive Legitimacy; Credibility.</i>
<b>January 2005</b>	Benchmark	Investment of \$10 million.	<i>Cognitive Legitimacy; Credibility.</i>
<b>November 2006</b>	Greylock Partners; Benchmark; Globespan Capital Partners	Investment of \$25 million.	<i>Cognitive Legitimacy; Credibility.</i>
<b>November 2007</b>	Boston Community Capital; Benchmark	Investment of \$45 million.	<i>Cognitive Legitimacy; Credibility.</i>
<b>December 2010</b>	Pinnacle Ventures; Meritech Capital Partners	Investment of \$21 million.	<i>Cognitive Legitimacy; Credibility.</i>
<b>January 2013</b>	Avis Budget Group	Buys Zipcar for \$500 million (Zipcar, though, will operate as an Avis subsidiary, retain its CEO and chief operating officer)	<i>Cognitive Legitimacy; Credibility.</i>
<i>Date</i>	<i>Actor</i>	③  TimeBanks	<i>Nature of Legitimacy Granting</i>
<b>NO INVESTORS</b> (Non-Profit prototypical organization)			
<i>Date</i>	<i>Actor</i>	④ 	<i>Nature of Legitimacy Granting</i>
<b>NO INVESTORS</b> (Non-Profit prototypical organization)			

Source: Crunchbase, 2017a; Crunchbase, 2017b.

Customers

Table 4 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by customers to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 4 – Evolution of Legitimacy Granting by Customers

Evolution of Legitimacy Granting by Customers			
STAKEHOLDER		PROTOTYPICAL ORGANIZATIONS	STAKEHOLDER
↘ Customers			↙ Customers
Date	Actor	 <p style="text-align: center;"><b>EVENTS</b></p> <ul style="list-style-type: none"> <li>→ <i>considering legitimacy granting as a whole to their field of action</i></li> <li>→ <i>considering individual legitimacy granting</i></li> </ul>	Nature of Legitimacy Granting
2012	NYU (New York University)	Study co-sponsored by <i>Make:</i> and <i>Intel</i> , where there is an in-depth analysis of the profile of makerspaces users/community, thus addressing why they opted for using makerspaces.	Consolidation of <i>Cognitive Legitimacy;</i> <i>Credibility.</i>
2015	PwC (Pricewaterhouse Coopers)	Report on assessing the SE and the customers'/public's adherence to SE products and services in the USA.	Consolidation of <i>Cognitive Legitimacy;</i> <i>Credibility.</i>
2015	Zipcar	Zipcar publishes a "story", where it presents a timeline in an infographic format of the key facts and metrics accumulated along the years regarding its customers' adherence.	Consolidation of <i>Cognitive Legitimacy;</i> <i>Credibility.</i>
2016	Airbnb	Report "airbnb citizen", showing the results of year 2016 in terms of customer adherence to its services.	Consolidation of <i>Cognitive Legitimacy;</i> <i>Credibility.</i>
2017	TimeBanks	As per date August 9, 2017, the "Directory of TimeBanks" reveals some key metrics showing the overall level of adherence of society worldwide: <ul style="list-style-type: none"> <li>✓ <i>Timebank communities:</i> 286;</li> <li>✓ <i>Individual members:</i> 21827;</li> <li>✓ <i>Countries:</i> 19 spread by the six continents – Asia, Africa, North America; South America, Europe and Australia;</li> <li>✓ <i>Cities:</i> 255.</li> </ul>	Consolidation of <i>Cognitive Legitimacy;</i> <i>Credibility.</i>

Source: NYU, 2012; PwC, 2015; Zipcar, 2017a; Zipcar, 2017b; Airbnb, 2016; TimeBanks, 2017b.

Media

Table 5 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by the media to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 5 – Evolution of Legitimacy Granting by the Media

Evolution of Legitimacy Granting by Media				
STAKEHOLDER		PROTOTYPICAL ORGANIZATIONS		STAKEHOLDER
↘ Media				↙ Media
<b>Date</b>	<b>Actor</b>			<b>Nature of Legitimacy Granting</b>
<b>PRESS</b> (newspapers and magazines)				
<b>2015</b>	Fortune (Magazine)	Alternative terms to SE are brought forward: <i>Gig Economy</i> , <i>On-Demand Economy</i> and <i>Rental Economy</i> .	<i>Cognitive Legitimation</i> ; <i>Credibility</i> .	
<b>2015</b>	The New York Times (Newspaper)	Article on the malefic effects of Airbnb renting for a local and quite neighborhood in Austin, Texas, USA.	<i>Cognitive Legitimation</i> ; <i>Credibility</i> discussion; <i>Sociopolitical Legitimation</i> discussion.	
<b>2015</b>	WSJ (The Wall Street Journal)	Article on the effect of Airbnb listings on the accommodation sector, particularly on “Hotel’s Power”, during Pope’s US visit. Main conclusions of the article.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .	
<b>2016</b>	FT (Financial Times Newspaper)	Article about the Sharing Economy, arguing that “regulators should not rush to curb Uber and Airbnb”.	<i>Cognitive Legitimation</i> ; <i>Credibility</i> ; <i>Sociopolitical Legitimation</i> discussion.	

<i>(continuation of table 5)</i>			
2016	El Mundo (Newspaper)	Article about Airbnb having legal barriers in Barcelona, Spain.	<i>Cognitive Legitimation; Credibility; Sociopolitical Legitimation discussion.</i>
2016	The Economist (Magazine)	Article "The sharing economy brings tycoon lifestyles within reach of some".	<i>Sameness; Distinctiveness; consolidation of Cognitive Legitimation; consolidation of Credibility.</i>
<b>TV NEWS BROADCASTERS</b>			
2014	CNBC TV News Channel	Periodic debate space named "Sharing Economy". These debates still run today and reach all sectors of activity with SE.	<i>Sameness; Distinctiveness; consolidation of Cognitive Legitimation; consolidation of Credibility.</i>
2014	BBC TV News Channel	Article "JustPark and the sharing economy".	<i>Sameness; Distinctiveness; Cognitive Legitimation; Credibility.</i>
2015	CNN TV News Channel	Article "Sharing is daring: mapping the disruption economy".	<i>Sameness; Distinctiveness; Cognitive Legitimation; Credibility.</i>
2016	Bloomberg TV News Channel	Video together with an article "The Sharing Economy Doesn't Share the Wealth".	<i>Cognitive Legitimation; Credibility discussion; Sociopolitical Legitimation discussion.</i>
2017	CBS TV News Channel	Video together with an article "Inside China's booming sharing economy".	<i>Sameness; Distinctiveness; consolidation of Cognitive Legitimation; consolidation of Credibility.</i>

(continuation of table 5)

**SOCIAL NETWORKS**

<p><b>Since Social Networks inception</b></p>	<p>Facebook, YouTube, Flickr, Pinterest and Twitter</p>	<p>How does the SE relate to media? As David Buckingham (2017) explains, “On one level, the sharing economy largely depends upon social media (in the form of the internet, apps and mobile devices) to market its services, and to develop reputations via user rating and recommendation systems. In this respect, it uses media technologies as tools. However, many of the same arguments apply to the sharing of media artefacts themselves – where the media are products rather than merely tools (...) In this sense, platforms like Facebook, YouTube, Flickr, Pinterest and Twitter could all be seen as examples of the sharing economy. They present themselves as services that enable the free sharing of media material (whoever produces it), but they are all commercial platforms that generate (or promise to generate) massive profits for their owners. The only notable exception to this is Wikipedia, which remains one of the very few non-commercial sharing platforms”.</p> <p>YouTube videos, for instance, are clear examples of how social media platforms serve to promote the services of <i>Airbnb</i>, <i>Zipcar</i>, <i>TimeBanks</i> and <i>Maker: makerspaces</i>. All these prototypical organizations make use of the potential and effectiveness of social media to reach their audiences, explain what they are, make self-referential identity claims and outline their value proposal.</p>	<p><i>Sameness; Distinctiveness; Cognitive Legitimation; Credibility.</i></p>
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Source: Fortune, 2015; The New York Times, 2015; WSJ, 2015; FT, 2016a; El mundo, 2016; The Economist, 2016; CNBC, 2014; BBC News, 2014; CNN, 2015; Bloomberg, 2016; CBS, 2017; Buckingham, 2017.

Other Analysts

Table 6 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by other analysts to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 6 – Evolution of Legitimacy Granting by Other Analysts

Evolution of Legitimacy Granting by Other Analysts			
STAKEHOLDER		PROTOTYPICAL ORGANIZATIONS	STAKEHOLDER
↘ Other Analysts			↙ Other Analysts
<b>Date</b>	<b>Actor</b>	 <p style="text-align: center;"><b>EVENTS</b></p> <ul style="list-style-type: none"> <li>→ considering legitimacy granting as a whole to their field of action</li> <li>→ considering individual legitimacy granting</li> </ul>	<b>Nature of Legitimacy Granting</b>
<b>2010</b>	Gansky	Book “The Mesh”. Introduction of the term “Mesh”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2015</b>	OECD	The Organization attempts to define the SE.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2015</b>	PwC (Pricewaterhouse Coopers)	Report on assessing the SE.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	ESA (Economics and Statistics Administration of the U.S. Commerce Department)	Report attempting to define and map out the contours of the SE.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	Sundararajan	Book “The Sharing Economy: the end of employment and the rise of crowd-based capitalism”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .

*(continuation of table 6)*

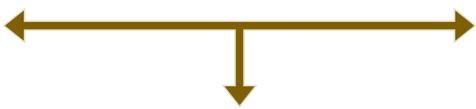
<b>2016</b>	Stone	Book "The Upstarts: How Uber, Airbnb, and the Killer Companies of the New Silicon Valley Are Changing the World".	<i>Sameness; Distinctiveness; Consolidation of Cognitive Legitimation; Credibility.</i>
<b>2016</b>	EC (European Commission)	Report "Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues".	<i>Consolidation of Cognitive Legitimation; Credibility; Steps towards Sociopolitical Legitimation.</i>

Source: Gansky, 2010; OECD, 2015a, OECD, 2015b; PwC, 2015; ESA, 2016; Sundararajan, 2016; Stone, 2016; EC, 2016.

*Other Interested Audiences*

Table 7 below presents the results in a concise timeline of the key events related with the evolution of legitimacy granting by other interested audiences to four prototypical SE organizations: *Airbnb*, *Zipcar*, *Timebanks* and *Make: makerspaces*.

Table 7 – Evolution of Legitimacy Granting by Other Interested Audiences

<i>Evolution of Legitimacy Granting by Other Interested Audiences</i>				
<b>STAKEHOLDER</b>		<b>PROTOTYPICAL ORGANIZATIONS</b>		<b>STAKEHOLDER</b>
↘ <i>Other Interested Audiences</i>				↙ <i>Other Interested Audiences</i>
<i>Date</i>	<i>Actor</i>			<i>Nature of Legitimacy Granting</i>
		<b>EVENTS</b> → <i>considering legitimacy granting as a whole to their field of action</i> → <i>considering individual legitimacy granting</i>		
<b>2013</b>	Switzer Foundation (Boston, USA)	Conference: "Sharing Economy Conference: Boston with Julia Ledewitz".		<i>Early days of Cognitive Legitimation; Credibility.</i>
<b>2015</b>	Breakers Makers (London, UK)	Conference: "The Sharing Economy & On Demand Conference".		<i>Cognitive Legitimation; Credibility.</i>
<b>2015</b>	Oxford Dictionary	The terms "Sharing Economy" (SE) and "Ride-Share" (RS) are added to Oxford Dictionary.		<i>Reinforcement of Cognitive Legitimation and Credibility.</i>

<i>(continuation of table 7)</i>			
<b>2015</b>	U.S. House (Washington DC, USA)	“The Congressional Sharing Economy Caucus”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2015</b>	FCT (Federal Trade Commission)	Public Workshop to Examine Competition, Consumer Protection and Economic Issues Raised by the Sharing Economy.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2015</b>	Utrecht University (Utrecht, Netherlands)	Workshop: “First International Workshop on the Sharing Economy”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	Milken Institute (Santa Monica, LA, USA)	Conference: “Is the Sharing Economy the New Normal?”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	ESCP Europe (Paris, France)	Workshop: “Second International Workshop on the Sharing Economy”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	Maddox Events (London, UK)	Conference: “The Sharing Economy Conference 2016”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	University of Southampton (Southampton, UK)	Workshop: “Third International Workshop on the Sharing Economy”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .
<b>2016</b>	Financial Times (London, UK)	Summit: “FT Sharing Economy Summit Europe 2016 – Achieving stability among growing regulation”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> ; Steps towards <i>Sociopolitical Legitimation</i> .
<b>2016</b>	Humboldt- Universität zu Berlin (Berlin, Germany)	Conference: “7th International Conference on Corporate Sustainability and Responsibility – CSR In an Age of Digitization”. One of the tracks was about the “Sharing Economy”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> ; Steps towards <i>Sociopolitical Legitimation</i> .
<b>2016</b>	Ryerson University (Toronto, Canada)	Conference: “The Sharing Economy and the Future of Work”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> ; Steps towards <i>Sociopolitical Legitimation</i> .
<b>2017</b>	Shidler College of Business – University of Hawaii (Mānoa, Hawaii)	Conference: “50th Hawaiian International Conference on System Sciences (HICSS)”. One of the tracks was about the “Sharing Economy”.	Consolidation of <i>Cognitive Legitimation</i> ; <i>Credibility</i> .

<i>(continuation of table 7)</i>			
<b>2017</b>	Lund University (Lund, Sweden)	Workshop: "Fourth International Workshop on the Sharing Economy".	Consolidation of <i>Cognitive Legitimation; Credibility.</i>
<b>2017</b>	Bizz Grid (Stockholm, Sweden)	Conference: "Sharing Economy and Earnings on Demand".	Consolidation of <i>Cognitive Legitimation; Credibility.</i>
<b>2017</b>	Universidade do Algarve (in collaboration with two other partner institutions: The University of Applied Sciences, Pforzheim, Germany; Autónoma University, Madrid, Spain (Faro, Portugal)	Conference: "Sharing Economy – Collaborative Consumption: Current trends and visions in key economic areas for Germany and Southern Europe".	Consolidation of <i>Cognitive Legitimation; Credibility.</i>
<b>2017</b>	ATINER – Athens Institute for Education and Research (Athens, Greece)	Conference: "A Panel on <i>The Sharing Economy</i> as part of the 4th Annual International Conference on Social Sciences".	Consolidation of <i>Cognitive Legitimation; Credibility.</i>

Source: Switzer Foundation, 2013; Breakers Makers, 2015; Liftshare, 2015; U.S. House, 2015; FCT, 2015a; FCT, 2015b; FCT, 2015c; Utrecht University, 2015; Milken Institute, 2016; ESCP Europe, 2016; Maddox Events, 2016; University of Southampton, 2016; FT, 2016b; Humboldt-Universität zu Berlin, 2016; Ryerson University, 2016; Shidler College of Business – University of Hawaii, 2017; Lund University, 2017; Bizz Grid, 2017; Universidade do Algarve, 2017; ATINER, 2017.

## Discussion

From a perspective of the evolution of the identity claims (self-referential) our findings reveal that none of the four prototypical SE organizations identify themselves as belonging to a category named “sharing economy”. However, all them present a progressive sustainable evolution in their identity claims with significant milestone events and facts overtime towards their consolidation in the market place. Observing the timeline evolution, we can see how far has each of the organizations evolved. Comparing the two temporal extremes of the timeline – one dated in the inception and another dated August 2017 – of each of them, we may notice how much they have elaborated, gained density and, consequently, got scale dimension along the years.

From a perspective of the evolution of legitimacy granting by stakeholders, and taking into consideration the studies of category creation – (i) Glynn & Navis, 2013; (ii) Durand & Paoletta, 2013; (iii) Kennedy & Fiss, 2013; (iv) Kennedy et al., 2010; (v) Lounsbury & Rao, 2004; (vi) Wry et al., 2014; (vii) Navis & Glynn, 2010; (viii) Tripsas, 2009; and (ix) Zuckerman, 1999, our findings respectively show that:

SE is still connoted with great uncertainties, category legitimation and, yes, there currently is an increasingly pressure from audiences, specially from Scholars and Governmental officials, in finding a legitimate and disciplined fit in societal categories. SE is acting as a general ambiguous category enabling divergence in identities and business models;

In the exercise of constructing a categorization meaning to SE, yes, one should consider a process that goes beyond a mere rigid, constraint, straitjacket categorical model. That is, SE seems to be contoured by (a) a causal dimension – i.e. since Airbnb uses web 2.0 whose purpose is to enable the sharing (in exchange of money) of rooms between a community, then its interested audiences may extrapolate that it is inserted within the SE category (“cognitive test of congruence”) – and (b) goal dimension – it generates ad hoc categories (goal-derived categories) – i.e. since Airbnb was created to serve as an appealing alternative, in terms of price, social experience, easiness in accessing, etc., to Hotel Reservations (“goal satisfying calculus”), then its interested audiences tend to legitimize it because it meets their goal satisfying calculus in having access to a less expensive service, more exciting social experience, less complicated reservation experience and an overall enhancement in comfort;

Yes, SE seems to be contoured by the two dimensions described by Kennedy and Fiss (2013): (a) – i.e. There is an “occasion and motivation” dimension for invoking Airbnb as a category. It seems to be a nascent and ad hoc category of “Accommodation”, as it facilitates a specific goal (audiences seek access to a less expensive service, more exciting social experience, less complicated reservation experience and an overall enhancement in comfort comparing to Hotel Reservations, for example); and (b) sure the emergence of Airbnb as a new ad hoc category implies a direct effect of pre-established ontologies, due to the simple fact that anything that is nascent and new will force the understanding (its true meaning) of how it will fit within pre-existent conformities and it will re-shape the ontological knowledge on the “accommodation” sector. Thus, the role of SE seems to be as a straitjacket in the definition of organizational identity, and types of business models within it;

Yes, there seems to be a “category currency” dimension associated with the construction of SE as a presumably “alternative” category. Explaining: if one applies the example of Zipcar in Kennedy et al.’s (2010) model of Category Meaning Construction and its 8 ways how category meaning can change, one would elaborate: the Focal Category (or reference category) would be “Taxi transportation”, whereas the Alternative for Consideration would be “Zipcar transportation”. Moreover, in evaluating the conformity of the latter one (in other words, how would one label it in the context of taxi transportation), one should consider the 8-hypothesis brought forward by Kennedy et al: 1) Should one re-define what “taxi transportation” is?, 2) Should one, instead, derive that there are two distinct services (Taxi and Zipcar), a sub-division, although belonging to the same focal category?, 3) Should one consider that none of these hypothesis is true and that Zipcar represents a subtraction of Taxi (in other words, is Zipcar an ad hoc category of Taxi?), 4) Should one validate that Zipcar is part of the Taxi Focal Category (subsumption)?, 5) Or is Zipcar a substitute of Taxi?, 6) Further, are Zipcar and Taxi a part of a much larger category – “Transportation” –, which allows one to recombine them into a broader categorization?, 7) Even further, is Zipcar inserted in a conglomerate that is formed by several ad hoc categories (ex: transportation in general: Taxi, Zipcar, BUS, Train, Car, Bicycle, Airplane and Boat transportation)?, 8) Or is Zipcar such a disruptive change that makes the market to re-organize itself and invert the logics of the transportation sector? Should, for example, Zipcar become the beacon, the main reference (the rising currency) of the transportation market and incorporate the rest into ad hoc categories (declining currencies) of itself? In other words, all existing “transportation” means should be

reconsidered and given a radical change in its meaning, that is, a previously overlooked or unappealing offering – Zipcar – becomes so popular that it disfavors a previously appealing service – Taxi? All things considered and taking into account Kennedy et al.'s model of Category Meaning Construction and its 8 ways of how category meaning can change, it becomes hard to have a clear answer to whether SE is a straitjacket or an ingredient of creativity in the definition of organizational identity. Meaning: it becomes hard to clearly answer each of the 8 questions above. It's difficult to positively say that SE is acting as a mere straitjacket in the definition of organizational identity. However, given that all 8 questions have, at this moment in time of the evolution of SE, an open answer, one may deduce that, for now, it may only have a role as an ingredient of creativity, which, one the other hand, turns SE as acting as a general ambiguous category enabling divergence in identities and business models. There isn't a well-defined, restricted "SE category" if one takes into account Kennedy et al.'s model of Category Meaning Construction. There currently still are rising many disruptive activities and businesses which are very difficult to frame them within a specific existent category (ex: Zipcar vs Taxi in the transportation sector. Do they belong to the same "focal category", or are they two distinct categories? The same co-relation analysis should be put into perspective regarding the other 3 prototypical organizations – Airbnb, TimeBanks and Make: makerspaces – in terms of their respective sector);

Having Lounsbury's and Rao's (2004) work as a reference, the results of the present study do not show any concrete answers, thus, leaving three open questions (maybe for future research opportunities) – (1) Is SE a "cultural construction" implicated in system of power? That is: will its durability last as long as its dominant producers (prototypes) compel industry media to maintain them?; (2) Without media attention, mediation, and their role as a platform for marketing spreading, will our current notion of SE as a "supposed" category wane and, thus, vanish?; (3) Based on Lounsbury's and Rao's findings, one should ask: is SE (the conceptualization of it and its growing referring and discussion over the last decade or so) a mere and harsh result of industry politics?;

SE firms seem to be hybrid. In the sense that there is a "head-modifier" structure when one category anchors cognition but is modified by features of the other. Example: Zipcar is a type of "transportation service" (the "focal category" or the "header" category, which anchors perceptions of what "transportation service" is), that is modified by features of the other category (the modifier). This other category is: "web 2.0 (mobile app) service" that apparently is less expensive, more convenient and fast in having access to, "presumably" providing a better overall experience to its external audience (consumers). Findings from Wry et al.'s (2014) study leads us to extrapolate that, for example, Zipcar and Airbnb may have been rewarded (ongoing process) or even punished by external audiences (being: consumers, investors, governmental officials, civil society in general) for hybridization contingent on how they mixed "transportation/accommodation", "innovation" and "technology". In general terms, these examples of SE services and activities (Zipcar, Airbnb, TimeBanks and Make: makerspaces) have largely been rewarded by customers over the last years, since their adherence to them has undoubtedly increased, but also been punished in some cases by external audiences: (i) taxi driver's community (its "fight" against Uber, for example) and (ii) governmental officials (Airbnb, for example, was forbidden in Berlin, Germany, in 2016). If one takes into consideration Wry et al.'s findings, that hybridization may indeed have a positive effect on audiences, then one may confirm that, at least from a consumer's perspective, SE firms such as Zipcar and Airbnb have been legitimized and not overlooked or devalued by them;

Bearing in mind Navis' and Glynn's (2010) determinants for legitimation, our results show that 4 out of 5 of those are present in the SE case, thus revealing that there is a pattern path of progressive legitimacy granting in consolidating its place as a category. Recalling the determinants: (1) *Sameness (or Close Substitution)* – there are a number of services that are perceived to be of the same type in satisfying market demand that may be grouped together as members of that same category. Ex: Schor's peer-to-peer, for-profit services (Relay Rides and Uber – both in the transportation sector); (2) *Distinctiveness* – there is a distinctiveness of the members of the SE category. Ex: Schor's peer-to-peer and business-to-peer, for-profit services (Airbnb and Zipcar – accommodation and transportation sectors, respectively); (3) *Credibility* – stakeholders (scientific community, customers, investors, media, other analysts and other interested audiences), actors external to the category are judging the feasibility, appropriateness and giving credibility to products and services labelled as SE ones; (4) *Cognitive legitimation* – stakeholders, the public in general are increasingly becoming familiarized with products and services associated to what has been labelled as SE ones; (5) However, the determinant of *Sociopolitical legitimation* is still under construction – SE companies are presently facing milestone challenges in gaining legitimation from governmental officials and regulators (Ex: Airbnb's prohibition in Berlin, Germany, and the taxi driver's community "fight" against Uber);

The results of our study (data shown in Tables 1 to 7) also meet Tripsas' (cited in Navis & Glynn, 2010) foundation that the legitimation construct is a complex social process involving both entrepreneurial organizations – in our case: *Airbnb*, *Zipcar*, *TimeBanks* and *Make: makerspaces* – and prospective resource providers (stakeholders), such as investors, analysts, customers, media, and other interested audiences, in the social construction of a market category's meaning, the formation of categorical and organizational identities, and perceptions about the viability of the business model;

Also, meeting Zuckerman's (1999, cited in Navis & Glynn, 2010) findings, our study confirms that audiences (stakeholders) have an absolutely vital influence in assessing the viability of SE and its organizations and can grant or withhold legitimacy to them.

### Conclusion and Limitations

In a first instance, from a perspective of the evolution of the identity claims (self-referential) of *Airbnb*, *Zipcar*, *TimeBanks* and *Make: makerspaces*, our findings show that none of them identify themselves as belonging to a SE category, thus, revealing that SE hasn't been having a significant role in establishing the identity of those organizations. In a second instance, from a perspective of the evolution of legitimacy granting by stakeholders to the same set of prototypical organizations, we complementarily were able to identify how a vast range of stakeholders, external actors and interested audiences have been granting legitimacy to them. Being a complex social process involving both entrepreneurial organizations and stakeholders, such as investors, analysts, customers, media, and other interested audiences, our study confirms that stakeholders have a critical influence in assessing the viability of SE and its organizations and can grant or withhold legitimacy to them. In this respect, there is a clear pattern path of a progressive legitimacy granting in establishing SE as a category (4 out of 5 identified determinants are present). It has been a process contoured by complex, dense and multifaceted evolutionary granting events. It becomes clearer that SE has been having a positive effect in establishing the identity of organizations belonging to the field. A comprehensive range of stakeholders –scientific community, investors, analysts, customers, media, and other interested audiences – have been studying, analysing, discussing, debating, put into perspective, investing, and adhering to SE products and services (including *Airbnb's*, *Zipcar's*, *TimeBanks'* and *Make: makerspaces'* ones) in a progressive manner along the years. Further, based on the studies of category creation discussed earlier, we generally conclude that the process of creating SE as a category is one that goes beyond a mere rigid, constraint, straitjacket categorical model. That is, at least for now, SE has only been having a role as an ingredient of creativity, which, one the other hand, turns SE as acting as a general ambiguous category enabling divergence in identities and business models. Moreover, SE prototypical organizations seem to be hybrid, in the sense that there is a "head-modifier" structure when one category anchors cognition but is modified by features of the other. Our findings lead us, on the other hand, to extrapolate that prototypical SE services and activities have largely been rewarded by customers over the last years, since their adherence to them has undoubtedly increased, but they also have been punished by other external audiences, namely, governmental officials and regulators for the hybridization contingent on how they mixed "transportation/accommodation", "innovation" and "technology", thus, not providing *Sociopolitical legitimation* to them. Examples of this are (i) the taxi driver's community "fight" against Uber and (ii) governmental officials in delaying clear regulations for SE companies, such as Airbnb, to legitimately act in the market zone.

Resuming, although each stakeholder gives SE prototypical organizations heterogeneous, diverse, very specific, different, well-defined and sometimes divergent contours (thus, each of them providing SE various activities a "straitjacket" dimension, in the sense of confining them to very specific spheres of action. Example: Schor's confinement of SE activities into four main archetypes – peer-to-peer, for-profit; business-to-peer, for-profit activity; peer-to-peer, non-profit and business-to-peer, non-profit) and as it shows signs of still being a mutant and evolving process of identity creation, SE seems to be countered by an ingredient of creativity in the definition of organizational identity more than a "straightjacket" force. Stakeholders, in general terms, broach and define SE in various forms and in their very own way. That is the same to say that, taking into consideration the evidence collected in this study, yes SE is constraining the identity claims for the stake of legitimacy granting and it still is acting as a general ambiguous category enabling divergence in identities and business models.

This study provides a number of contributions to extant literature. From an academic perspective, it offers a new layer on framing a detailed understanding of the SE field in its maturing dimension, thus, meeting Mair and Reischauer's (2017) call for studying the SE, unpack and make sense of an inspiring and complex phenomenon and thereby to advance and refine existing theory. From a methodological perspective, this paper contributes in making an historical analysis of the establishment of organizational identity of four prototypical SE organizations, considering identity claims and legitimacy

granting. From a practical point of view, it can serve as a guide (for new up-coming SE aspiring organizations/entities, for example) to (i) understand what it takes to be considered and legitimated as an SE activity and (ii) get a deeper glance over how socially complex it is to gain legitimation from stakeholders, as it interdependently involves entrepreneurial organizations and prospective resource providers (such as investors, analysts, customers, media, and other interested audiences) in the social construction of their market category meaning, the formation of their categorical and organizational identities, and perceptions about the viability of their business models.

This study is not without limitations. At the forefront, it may be criticized for being too descriptive, in the sense that there wasn't any experimental design involved in it. The aim was, nevertheless, to make an historical analysis of the establishment of SE organizational identity, considering both identify claims and legitimacy granting, thus, it would always have by default a descriptive dimension associated to it. Second, regarding the chosen sample – just four prototypical organizations –, it would have enlarged the consistency and robustness of our analysis and consequent findings if we would have added more organizations. In this respect, however, our aim was to primary analyze all four Schor's four SE archetypes of activities, so no activity would be left behind. Having that as a premise, we then chose one organization per archetype of activity and, consequently, came up with *Airbnb*, *Zipcar*, *TimeBanks* and *Make: makerspaces*. Third, in terms of the *business-to-peer, for-profit activity* option chosen, we reckon that the study would probably have gained more visibility in case, for example, we had opted for the prototypical organization of *Uber* instead of *Zipcar*, mostly for the simple fact that the first has been caught greater attention from stakeholders and audiences, recently. In this respect, yes, we contemplated the first one, but, unfortunately, its website wasn't and still isn't running in Portugal due to regulatory constraints, thus, not allowing to obtain direct identity claims data. Fourth, there may certainly be more stakeholders that could well be included in our analysis list of the evolution of legitimacy granting. However, our objective wasn't to make a systematic literature review nor include all existing stakeholders, but rather to analyze the maximum spectrum of stakeholders as possible.

## References

- [1] Airbnb (2016) *Airbnb's 2016 highlights and 2017 trends we're watching*. (Online) Available from: [https://www.airnbncitizen.com/airbnbs-2016-highlights-and-2017-trends-were-watching/](https://www.airbnb.com/citizen.com/airbnbs-2016-highlights-and-2017-trends-were-watching/) (Accessed: 11<sup>th</sup> July 2017).
- [2] Airbnb (2017) *Fast Facts. The Airbnb Story*. (Online) Available from: <https://press.airbnb.com/fast-facts/> (Accessed: 31<sup>st</sup> July 2017).
- [3] Aldrich, H. E. & Fiol, C. M. (1994) Fools rush in? The Institutional context of industry creation. *Academy of Management Review*, 19(4), 645.
- [4] ATINER (2017) *A Panel on The Sharing Economy as part of the 4th Annual International Conference on Social Sciences*. (Online) Available from: <https://www.atiner.gr/2017Conferences> (Accessed: 5<sup>th</sup> May 2017).
- [5] Bardhi, F. & Eckhardt, G. (2012) Access based consumption: The case of car sharing. *Journal of Consumer Research*, 39, 881–898.
- [6] Barsalou, L. W. (1983) Ad hoc categories. *Memory & Cognition*, 11, 211–27.
- [7] Bauwens, M. (2005) *The political economy of peer production*. (Online) Available from: <http://www.informatik.uni-leipzig.de/~graebe/Texte/Bauwens-06.pdf> (Accessed: 3<sup>rd</sup> April 2017).
- [8] BBC News (2014) *JustPark and the sharing economy*. (Online) Available from: <http://www.bbc.com/news/technology-28686606> (Accessed: 11<sup>th</sup> August 2017).
- [9] Belk, R. (2014) You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67, 1595–1600.
- [10] Benkler, Y. (2002) Coase's Penguin, or, Linux and The Nature of the Firm. *Yale Law Journal*, pp. 369–446.
- [11] Bizz Grid (2017) *Sharing Economy and Earnings on Demand*. (Online) Available from: <https://bizzgrid.com/talks/earnings-on-demand-17> (Accessed: 17<sup>th</sup> August 2017).
- [12] Bloomberg, (2016) *The Sharing Economy Doesn't Share the Wealth*. (Online) Available from: <https://www.bloomberg.com/news/articles/2016-04-06/the-sharing-economy-doesn-t-share-the-wealth> (Accessed: 11<sup>th</sup> August 2017).
- [13] Bonciu, F. & Bălgar, A. C. (2016) Sharing Economy as a Contributor to Sustainable Growth. An EU Perspective. *Romanian Journal of European Affairs*, 16(2), 36–45.
- [14] Botsman, R. & Rogers, R. (2010) *What's mine is yours: The rise of collaborative consumption*. New York: Harper Collins.
- [15] Bradley, K. & Pargman, D. (2017) The sharing economy as the commons of the 21st century. *Cambridge Journal of Regions Economy and Society*, 10(2), 231–247.
- [16] Breakers Makers (2015) *The Sharing Economy & On Demand Conference*. (Online) Available from: <http://www.breakerstomakers.com> (Accessed: 7<sup>th</sup> August 2017).

- [17] Buckingham, D. (2017) *Media and the sharing economy*. (Online) Available from: <https://davidbuckingham.net/2017/05/02/media-and-the-sharing-economy/> (Accessed: 11<sup>th</sup> August 2017).
- [18] CBS (2017) *Inside China's booming sharing economy*. (Online) Available from: <http://www.cbsnews.com/news/china-popular-sharing-economy-exploding-didi/> (Accessed: 11<sup>th</sup> August 2017).
- [19] Cheng, M. (2016) Sharing economy: A review and agenda for future research. *International Journal of Hospitality Management*, 57, 60–70.
- [20] CNBC (2014) *Sharing Economy*. (Online) Available from: <https://www.cnbc.com/sharing-economy/?page=4> (Accessed: 7<sup>th</sup> August 2017).
- [21] CNN (2015) *Sharing is daring: mapping the disruption economy*. (Online) Available from: <http://edition.cnn.com/2014/09/19/business/sharing-economy-guide/index.html> (Accessed: 11<sup>th</sup> August 2017).
- [22] Cohen, B. & Kietzmann, J. (2014) Ride On! Mobility Business Models for the Sharing Economy. *Journal of Organization & Environment*, 27 (3), 279–296.
- [23] Crunchbase (2017a) *Airbnb – Investors*. (Online) Available from: <https://www.crunchbase.com/organization/airbnb#entity> (Accessed: 7<sup>th</sup> August 2017).
- [24] Crunchbase (2017b) *Zipcar – Investors*. (Online) Available from: <https://www.crunchbase.com/organization/zipcar#entity> (Accessed: 7<sup>th</sup> August 2017).
- [25] Davis, M. (2017) *A Brief History of Makerspaces*. (Online) Available from: <https://curiositycommons.wordpress.com/a-brief-history-of-makerspaces/> (Accessed: 31<sup>st</sup> July 2017).
- [26] Dubois, E., Schor, J., & Carfagna, L. (2014) *New Cultures of Connection in a Boston Time Bank*. In J. Schor & C. Thompson (Eds.), *Practicing Plenitude*. New Haven: Yale University Press.
- [27] Durand, R., & Paolella, L. (2013) Category stretching- Reorienting research on categories in strategy, entrepreneurship, and organization theory. *Journal of Management Studies*, 50(6), 1100–1123.
- [28] EC (2016) *Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues*. JRC Technical Reports. European Commission. (Online) Available from: <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC100369.pdf> (Accessed: 3<sup>rd</sup> April 2017).
- [29] Eha, B. P. (2013) *Zipcar Timeline: From Business Idea to IPO to \$500 Million Buyout*. (Online) Available from: <https://www.entrepreneur.com/article/225399> (Accessed: 1<sup>st</sup> August 2017).
- [30] El Mundo (2016) *Al menos 9.786 anuncios en Airbnb sin licencia en Barcelona*. (Online) Available from: <http://www.elmundo.es/economia/2016/08/15/57b046bfca4741ce038b4577.html> (Accessed: 11<sup>th</sup> August 2017).
- [31] ESA (2016) *Digital Matching Firms: A New Definition in the “Sharing Economy” Space*. (Online) Available from: <http://www.esa.doc.gov/reports/digital-matching-firms-new-definition-“sharing-economy”-space> (Accessed: 3<sup>rd</sup> April 2017).
- [32] ESCP Europe (2016) *Second International Workshop on the Sharing Economy*. (Online) Available from: <http://shareco.strikingly.com/> (Accessed: 11<sup>th</sup> August 2017).
- [33] Fortune (2015) *Sharing Economy*. As “sharing economy” fades, these 2 phrases are likely to replace it. (Online) Available from: <http://fortune.com/2015/07/29/sharing-economy-chart/> (Accessed: 11<sup>th</sup> August 2017).
- [34] Frenken, K. & Schor, J. (2017) Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, 23, 2–10.
- [35] FT (2016a) *Regulators should not rush to curb Uber and Airbnb*. (Online) Available from: <https://www.airdna.co/research> (Accessed: 11<sup>th</sup> August 2017).
- [36] FT (2016b) *FT Sharing Economy Summit Europe 2016 – Achieving stability among growing regulation*. (Online) Available from: <https://live.ft.com/Events/2016/FT-Sharing-Economy-Summit-Europe-2016> (Accessed: 11<sup>th</sup> August 2017).
- [37] FTC (2015a) *FTC The “Sharing” Economy Workshop transcript segment 3 - June 9, 2015*. Washington D.C.: Federal Trade Commission. (Online) Available from: [https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc\\_sharing\\_economy\\_workshop\\_-\\_transcript\\_segment\\_3.pdf](https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc_sharing_economy_workshop_-_transcript_segment_3.pdf) (Accessed: 3<sup>rd</sup> April 2017).
- [38] FTC (2015b) *FTC The “Sharing” Economy Workshop transcript segment 4 - June 9, 2015*. Washington D.C.: Federal Trade Commission. (Online) Available from: [https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc\\_sharing\\_economy\\_workshop\\_-\\_transcript\\_segment\\_4.pdf](https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc_sharing_economy_workshop_-_transcript_segment_4.pdf) (Accessed: 3<sup>rd</sup> April 2017).
- [39] FTC (2015c) *The “Sharing” Economy Workshop transcript segment 2 - June 9, 2015*. Washington D.C.: Federal Trade Commission. (Online) Available from: [https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc\\_sharing\\_economy\\_workshop\\_-\\_transcript\\_segment\\_2.pdf](https://www.ftc.gov/system/files/documents/videos/sharing-economy-workshop-part-2/ftc_sharing_economy_workshop_-_transcript_segment_2.pdf) (Accessed: 3<sup>rd</sup> April 2017).
- [40] Frenken, K., Meelen, T., Arets, M. & van de Glind, P. (2015) *Smarter regulation for the sharing economy*. The Guardian. (Online) Available from: <http://www.theguardian.com/science/political-science/2015/may/20/smarter-regulation-for-the-sharing-economy> (Accessed: 3<sup>rd</sup> April 2017).
- [41] Gansky, L. (2010) *The mesh: Why the future of business is sharing*. New York: Portfolio Penguin.
- [42] Glynn, M. A., & Navis, C. (2013) Categories, identities, and cultural classification: Moving beyond a model of categorical constraint. *Journal of Management Studies*, 50(6), 1124–1137.

- [43] Hamari, J., Sjöklint, M. & Ukkonen, A. (2015) The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, n/a-n/a. doi: 10.1002/asi.23552.
- [44] Hira, A. & Reilly, K. (2017) The Emergence of the Sharing Economy: Implications for Development. *Journal of Developing Societies*, 33, 2, 1–16.
- [45] Humboldt-Universität zu Berlin (2016) *7th International Conference on Corporate Sustainability and Responsibility – CSR In an Age of Digitization*. (Online) Available from: <https://www.csr-hu-berlin.org/content/about> (Accessed: 11<sup>th</sup> August 2017).
- [46] Liftshare (2015) *Oxford Dictionary adds sharing economy and ridesharing descriptions*. (Online) Available from: <http://blog.liftshare.com/industry/oxford-dictionary-adds-sharing-economy-and-ridesharing-descriptions> (Accessed: 3<sup>rd</sup> April 2017).
- [47] Kaufman, A. C. (2016) *Zipcar Is Renting Its Vehicles Out For Free On Election Day*. (Online) Available from: [http://www.huffingtonpost.com/entry/zipcar-election-day\\_us\\_581cc14ae4b0d9ce6fb8fde](http://www.huffingtonpost.com/entry/zipcar-election-day_us_581cc14ae4b0d9ce6fb8fde) (Accessed: 1<sup>st</sup> August 2017).
- [48] Kennedy, M. T. (2008) Getting counted: Markets, media, and reality. *American Sociological Review*, 73(2), 270-295.
- [49] Kennedy, M. T. & Fiss, P. C. (2013) An ontological turn in categories research – From standards of legitimacy to evidence of actuality. *Journal of Management Studies*, 50(6), 1138–1154.
- [50] Kennedy, M. T., Lo, J., & Lounsbury, M. (2010) Category currency – A framework for analyzing the effects of meaning construction process. *Research in the Sociology of Organizations*, 31, 369–397.
- [51] Kim, J., Yoon, Y. & Zo, H. (2015) *Why people participate in the Sharing Economy: A Social Exchange Perspective*. Pacific Asia Conference on Information Systems (PACIS). PACIS 2015 Proceedings.
- [52] Knote, R. & Blohm, I. (2016) *Deconstructing the Sharing Economy: On the Relevance for IS Research*. Konferenz Mobilität & Digitalisierung (MMS 2016).
- [53] Lee, Y., Lee, S. & Ryu, M. H. (2016) *A Study on Factors Influencing Consumers' Information Needs for Sharing Economy Service*. (Online) Available from: [https://www.researchgate.net/publication/315930853\\_A\\_Study\\_on\\_Factors\\_Influencing\\_Consumers'\\_Information\\_Needs\\_for\\_Sharing\\_Economy\\_Service](https://www.researchgate.net/publication/315930853_A_Study_on_Factors_Influencing_Consumers'_Information_Needs_for_Sharing_Economy_Service) (Accessed: 13<sup>th</sup> August 2017).
- [54] Lessig, L. (2008) *Remix: Making art and commerce thrive in the hybrid economy*. New York: Penguin.
- [55] Liftshare blog (2015) *Oxford Dictionary adds sharing economy and ridesharing descriptions*. (Online) Available from: <http://blog.liftshare.com/industry/oxford-dictionary-adds-sharing-economy-and-ridesharing-descriptions> (Accessed: 3<sup>rd</sup> April 2017).
- [56] Lounsbury, M. & Rao, H. (2004) Sources of durability and change in market classifications – A study of the reconstitution of product categories in the American mutual fund industry, 1944–1985. *Social Forces*, 82(3), 969–999.
- [57] Lund University (2017) *Fourth International Workshop on the Sharing Economy*. (Online) Available from: <http://www.iiiee.lu.se/article/the-4th-international-workshop-on-the-sharing-economy> (Accessed: 17<sup>th</sup> August 2017).
- [58] Lovins, H. & Cohen, B. (2011) *Climate capitalism: Capitalism in the age of climate change*. New York, NY: Hill & Wang.
- [59] Macalister, T. (2013) *Mergers and Acquisitions. Avis Budget buys Zipcar for \$500m – a 50% premium to its share value*. (Online) Available from: <https://www.theguardian.com/business/2013/jan/02/avis-budget-buys-zipcar-share-value> (Accessed: 1<sup>st</sup> August 2017).
- [60] Maddox Events (2016) *The Sharing Economy Conference 2016*. (Online) Available from: <http://maddoxevents.wixsite.com/maddox-2> (Accessed: 1<sup>st</sup> August 2017).
- [61] Mair, J. & Reischauer, G. (2017) Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. *Technological Forecasting and Social Change*. ISSN 0040-1625.
- [62] Make: makerspaces (2017) *About Us*. (Online) Available from: <http://spaces.makerspace.com/> (Accessed: 1<sup>st</sup> August 2017).
- [63] Meelen, T. & Frenken, K. (2015) *Stop Saying Uber Is Part Of The Sharing Economy*. FastCompany. (Online) Available from: <http://www.fastcoexist.com/3040863/stop-saying-uber-is-part-of-the-sharing-economy> (Accessed: 3<sup>rd</sup> April 2017).
- [64] Milken Institute (2016) *Is the Sharing Economy the New Normal?* (Online) Available from: <http://www.milkeninstitute.org/events/conferences/global-conference/2016/panel-detail/6223> (Accessed: 1<sup>st</sup> August 2017).
- [65] Munoz, P. & Cohen, B (2017) Mapping out the Sharing Economy: A Configurational Approach to Sharing Business Modeling. *Technological Forecasting and Social Change*. ISSN 0040-1625.
- [66] Navis, C., Fisher, G., Raffaelli, R., Glynn, M. A. & Watkiss, L. (2012) The market that wasn't: the non-emergence of the online grocery category. Proceedings of the New Frontiers in Management and Organizational Cognition Conference. National University of Ireland Maynooth.
- [67] Navis, C. & Glynn, M. A. (2010) How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990-2005. *Administrative Science Quarterly*, 55, 439-471.
- [68] NYU (2012) *Maker Market Study: An In-depth Profile of Makers at the Forefront of Hardware Innovation*. (Online) Available from: [http://www.nyu.edu/social-entrepreneurship/speaker\\_series/pdf/Maker Market Study FINAL.pdf](http://www.nyu.edu/social-entrepreneurship/speaker_series/pdf/Maker%20Market%20Study%20FINAL.pdf) (Accessed: 11<sup>th</sup> August 2017).
- [69] OECD. (2015a) *Digital Economy Outlook 2015*. Paris: OECD Publishing.

- [70] OECD. (2015b) *New Form of Work in the Sharing Economy. Background for Discussion*. Paris: OECD, Working Party on Measurement and Analysis of the Digital Economy, DSTI/ICCP/IIS (2015)3.
- [71] Owyang, J. (2013) *The Collaborative Economy*. (Online) Available from: <https://www.slideshare.net/Altimeter/the-collaborative-economy> (Accessed: 3<sup>rd</sup> April 2017).
- [72] Penn, J. & Wihbey, J. (2016) *Uber, Airbnb and consequences of the sharing economy: Research roundup*. (Online) Available from: <http://journalistsresource.org/studies/economics/business/airbnb-lyft-uber-bike-share-sharing-economy-research-roundup> (Accessed: 18<sup>th</sup> June 2016).
- [73] PwC (2015) *The Sharing Economy*. (Online) Available from: <https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf> (Accessed: 18<sup>th</sup> June 2016).
- [74] Rehder, B. (2003a) Categorization as causal reasoning. *Cognitive Science*, 27, 709–48.
- [75] Rehder, B. (2003b) A causal-model theory of conceptual representation and categorization. *Journal of Experimental Psychology – Learning Memory and Cognition*, 29, 1141–59.
- [76] Rosch, E. & Mervis, C. B. (1975) Family resemblances: studies in internal structure of categories. *Cognitive Psychology*, 7, 573–605.
- [77] Ryerson University (2016) *The Sharing Economy and the Future of Work*. (Online) Available from: [http://www.ryerson.ca/clmr/publications/2016\\_10\\_24/](http://www.ryerson.ca/clmr/publications/2016_10_24/) (Accessed: 6<sup>th</sup> August 2017).
- [78] Schor, J. B. (2014) *Debating the Sharing Economy*. (Online) Available from: [http://www.tellus.org/pub/Schor\\_Debating\\_the\\_Sharing\\_Economy.pdf](http://www.tellus.org/pub/Schor_Debating_the_Sharing_Economy.pdf) (Accessed: 16<sup>th</sup> August 2015).
- [79] Schor, J. (2015) Getting Sharing Right. *Contexts*, 14(1), 14–15.
- [80] Schor, J. & Fitzmaurice, C. (2015) Collaborating and Connecting: The emergence of the sharing economy. *Handbook of Research on Sustainable Consumption* (pp. 410–425). Cheltenham, UK: Edward Elgar.
- [81] Schor, J., Fitzmaurice, C., Carfagna, L. & Will-Attwood, C. (2014) *Paradoxes of Openness and Distinction in the Sharing Economy*. Boston: Boston College.
- [82] Shidler College of Business – University of Hawaii (2017) *50th Hawaiian International Conference on System Sciences (HICSS)*. (Online) Available from: <http://shidler.hawaii.edu/events/2017/01/04/hawaii-international-conference-on-system-sciences-50th-anniversary> (Accessed: 17<sup>th</sup> August 2017).
- [83] Silver, J. (2013) *The sharing economy: a whole new way of living*. (Online) Available from: <http://www.theguardian.com/technology/2013/aug/04/internet-technology-fon-taskrabbit-blablacar> (Accessed: 23<sup>rd</sup> August 2014).
- [84] Smith, E. B. (2011) Identities as Lenses: How Organizational Identity Affects Audiences' Evaluation of Organizational Performance. *Administrative Science Quarterly*, 56, 61–94.
- [85] Stead, J. G. & Stead, W. E. (2013) The coevolution of sustainable strategic management in the global marketplace. *Organization & Environment*, 26, 162–183.
- [86] Stone, B. (2016) *The Upstarts: How Uber, Airbnb, and the Killer Companies of the New Silicon Valley Are Changing the World*. Little, Brown.
- [87] Sundararajan, A. (2016) *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. Cambridge, MA: The MIT Press.
- [88] Switzer Foundation (2013) *Sharing Economy Conference: Boston with Julia Ledewitz*. (Online) Available from: <http://www.switzernetwork.org/events/sharing-economy-conference-boston-julia-ledewitz> (Accessed: 6<sup>th</sup> August 2017).
- [89] The Economist (2016) *The sharing economy brings tycoon lifestyles within reach of some*. (Online) Available from: <https://www.economist.com/news/business-and-finance/21710767-thanks-companies-such-netjets-getmyboat-and-thirdhomeom-merely-rich-can-upgrade> (Accessed: 11<sup>th</sup> August 2017).
- [90] The New York Times (2015) *New Worry for Home Buyers: A Party House Next Door*. (Online) Available from: [https://www.nytimes.com/2015/10/10/your-money/new-worry-for-home-buyers-a-party-house-next-door.html?\\_r=0](https://www.nytimes.com/2015/10/10/your-money/new-worry-for-home-buyers-a-party-house-next-door.html?_r=0) (Accessed: 11<sup>th</sup> August 2017).
- [91] TimeBanks (2017a) *About*. (Online) Available from: <https://timebanks.org/about/> (Accessed: 1<sup>st</sup> August 2017).
- [92] TimeBanks (2017b) *Directory of TimeBanks*. (Online) Available from: <http://community.timebanks.org/> (Accessed: 9<sup>th</sup> August 2017).
- [93] Universidade do Algarve (2017) *Sharing Economy – Collaborative Consumption: Current trends and visions in key economic areas for Germany and Southern Europe*. (Online) Available from <https://www.jiscmail.ac.uk/cgi-bin/webadmin?A2=TOURISM-CULTURE-POLICY;58f58de3.1702> (Accessed: 18<sup>th</sup> August 2017).
- [94] University of Southampton (2016) *Third International Workshop on the Sharing Economy*. (Online) Available from: <https://www.southampton.ac.uk/wsa/news/events/iwse/index.page> (Accessed: 6<sup>th</sup> August 2017).
- [95] U.S. House (2015) *Swallow, Issa Announce the Sharing Economy Caucus*. (Online) Available from: <https://swallow.house.gov/media-center/press-releases/swallow-issa-announce-sharing-economy-caucus> (Accessed: 3<sup>rd</sup> April 2017).

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- [96] Utrecht University (2015) *First International Workshop on the Sharing Economy*. (Online) Available from: <https://www.uu.nl/en/IWSE2015> (Accessed: 1<sup>st</sup> August 2017).
- [97] Wry, T., Lounsbury, M. & Jennings, P. D. (2014) Hybrid vigor- Securing venture capital by spanning categories in nanotechnology. *Academy of Management Journal*, 57(5), 1309–1333.
- [98] *WSJ (2015) Airbnb Crimps Hotels' Power on Pricing. Lodging listings surged for pope's U.S. visit, challenging hotel industry.* (Online) Available from: <https://www.wsj.com/articles/airbnb-crimps-hotels-power-on-pricing-1443519181> (Accessed: 1<sup>st</sup> August 2017).
- [99] Yang, S., Song, Y., Chen, S. & Xia, X. (2017) Why are customers loyal in sharing-economy services? A relational benefits perspective. *Journal of Services Marketing*, Vol. 31, Issue: 1, 48–62.
- [100] Zifkin, A. (2015) Interview. In: *Politik Media Inc.* 2015. (Online) Available from: <http://www.politik.io/articles/the-sharing-economy/> (Accessed: 16<sup>th</sup> June 2016).
- [101] Zipcar (2015) *Ziptopia. 15 Years of Zipcar. One Epic Ride. [Infographic]*. (Online) Available from: <http://www.zipcar.com/ziptopia/inside-zipcar/15-years-of-zipcar-one-epic-ride-infographic> (Accessed: 11<sup>th</sup> August 2017).
- [102] Zipcar (2017a) *About us*. (Online) Available from: <http://www.zipcar.com/about> (Accessed: 1<sup>st</sup> August 2017).
- [103] Zipcar (2017b) *Ziptopia. 10 Things You Didn't Know About Zipcar (Okay, More Than 10) [Infographic]*. (Online) Available from: <http://www.zipcar.com/ziptopia/inside-zipcar/history-of-zipcar-infographic> (Accessed: 6<sup>th</sup> August 2017).

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## Study of Economic Assistance Service from the Perspective of Gender in the Municipality of Elbasan

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### Abstract

The study aims to evaluate social service delivery of economic aid under the gender perspective in Elbasan Municipality. It describes and analyzes the situation by assessing needs and highlights the problems that exist. It also studies the effects of the achievement of gender equality at the local level as it has practicability and economic aid law as it is involved in gender element. This study is based on an explanatory hypothesis. Search nature includes a mixed methodology that includes data of interpretative and narrative methods but also to address the findings in quantitative terms. Sampling units (Office of N.E.) is intentional because the very topic of research aims to assess the services provided by public bodies. Besides, research survey is used as one of the best methods to provide information directly from individuals who are benefiting from the scheme N.E. Elbasan Municipality and specialists working in the sector and services and found. The selection of respondents is done randomly but semi-oriented. The survey was completed by the face to face method. To achieve a gender balance in economic aid programs, it is important to strengthen government mechanisms at the local level in the context of addressing the practical and strategic needs of women and men.

**Keywords:** Economic assistance, Integration, Access, Control, Gender discrimination.

