

**Fifth International  
Scientific Conference**

**ERAZ 2019**



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Association of Economists  
and Managers of the Balkans  
**UdekoM Balkan**





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## PREFACE

Economic development refers to the improvement of activities in the economy, which leads to progressive changes in the socio-economic structure and the rising of living standards. Given that the objective of sustainable economic development is elimination of poverty, inequality and unemployment - thus leading to social inclusion and improvement of the quality of life; it is necessary in analysis of this important issue apply extremely multidisciplinary approach.

Faculty of Business Studies, Mediterranean University - Podgorica, Montenegro; University of National and World Economy - Sofia, Bulgaria; Faculty of Commercial and Business Studies - Celje, Slovenia; Faculty of Applied Management, Economics and Finance - Belgrade, Serbia and the Association of Economists and Managers of the Balkans have recognized following issue and organized in Budapest on May 23, 2019 at the Hotel Vitta Superior Fifth International Scientific Conference titled: ***Knowledge based sustainable development - ERAZ 2019***.

The conference objective was to bring together academic community (experts, scientists, engineers, researchers, students and others) and publication of their scientific papers for the purpose of popularization of science and their personal and collective affirmation. The unique program combined interactive discussion and other forms of interpersonal exchange of experiences and presentation of the latest scientific developments in following areas.

- Microeconomics and macroeconomics,
- Economic policy,
- International Economics and Trade,
- International Business,
- Economic diplomacy,
- Lobbying,
- Globalization,
- European business,
- Modern management and innovation,
- Business and Public Finance,
- Fiscal policy,
- Stock exchange and financial markets,
- Risk management,
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- Modern forms of entrepreneurship and investment,
- Investment Management,
- Enterprise and Learning,
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- Corporate entrepreneurship,
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- Marketing of non-profit sector,
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- Labor law,
- Business law,
- The role of the rule of law in the country's progress,
- Human rights and protection of minorities,
- Legal aspects of EU integration,
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- The reform of corporate law in countries in transition,
- CEFTA,
- Ecology and energy,
- Renewable energy,
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1. **Journal of Innovative Business and Management** is published by DOBA Faculty, Maribor (Slovenia) and referred in international scientific journal bases DOAJ, EconPapers, ResearchGate and RePec. It has been published since 2009 and since then it has been attracting more and more interest among the readers, who predominantly come from academia and business practice.
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# CHALLENGES OF ALCOHOL TAXATION POLICIES AND ALCOHOL CONSUMPTION MEASUREMENT

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**Abstract:** *Excessive alcohol consumption is a major health and social hazard of a modern society. Alcohol excise duties are important tool in hands of policymakers regarding possibilities to restrain and to control alcohol consumption. However, European Union directive 92/84/EEC undermines this potential with prescription of zero tax rates for wine which opens many doors of tax avoidance, substitution and smuggling opportunities. Regarding possible solutions, it is necessary to abolish zero tax rates for wine in European Union and to treat all alcoholic beverages equally in terms of taxation.*

**Keywords:** *alcohol, tax, excise, smuggling, health, wine, consumption.*

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## 1. FOREWORD

This article will give a review of major challenges in the field of alcohol taxation policies and alcohol consumption measurement in order to give a clear picture to all parties interested in these fields, such as fiscal, health and social policy makers. Taxation of alcohol in European Union is regulated by Council Directive 92/93/EEC which prescribes various categories of alcoholic beverages which are subject of this policy, basis on which tax rate is calculated and various exemptions for industrial alcohol and possibilities for reduced rates for independent breweries [1], and Council Directive 92/84/EEC which sets the minimum rates of excise duties for alcohol and alcoholic beverages. Directive 92/84/EEC prescribes zero rates for wine and sparkling wine, which seriously undermines the potential of any alcohol related fiscal and social policy, giving consumers a lot of opportunities to avoid heavy taxed spirits or beer and to replace them with wine [2].

After foreword, first chapter will tackle more deeply into main reasons for imposing excise duties on alcohol, and second chapter will discuss consequences of alcohol excise duties increase. Third chapter will analyse methods of alcohol consumption measurement, and in conclusion main problems of current alcohol excise duties system in European Union will be pointed out.

## 2. MAIN REASONS FOR IMPOSING ALCOHOL EXCISE DUTIES

Excessive consumption of alcohol creates many problems for individuals, their families and society as a whole. There are many reasons for imposing alcohol excise duties, but most significant could be divided in three major categories – health, social and economic.

Alcohol is recognized as one of the leading causes of cancer and ill health, which contributes significantly to the increase of overall mortality rates within population. High levels of alcohol consumption in the long run increase the risk of liver cirrhosis and chronic pancreatitis [3].

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Alcohol is a substance which is an important risk factor for many types of cancer, such as liver, throat, esophagus, mouth and breast cancers, and to certain extent increases the risk of stomach and colon cancers [4].

Alcohol consumption can have many social consequences and negative external effects. Long term alcohol abuse can lead to alcohol dependence, which is a huge problem for the family of the addict and society as a whole. Linear relationship between alcohol and depression is proven [5]. Moreover, many traffic accidents are caused because of the drunk driving; compelling evidence exists about driver impairment when blood level of alcohol is above zero [6]. Furthermore, with higher levels of alcohol intoxication there is a greater probability for usage of emergency rooms or some extended medical treatment [7] and in such a way alcohol consumption increases costs of a public health system.

Main economic reason behind imposing of alcohol excise duties is mitigation of negative external effects which are caused by alcohol consumption, with the aim of reducing levels of alcohol consumption to the acceptable and sustainable levels, having in mind negative external effects [8]. On the other hand, excise duties are quite handy tool when government needs quickly to raise some funds, due to several key features of excise duties taxes. Firstly, they are very easy and cheap to collect in terms of government administrative effort since there is relatively small number of obligors. Furthermore, it will be hard for consumers to adjust levels of consumption accordingly to excise duties and prices of the products increase in the short run, thus giving government good possibility to collect significant funds if needed. Considering the above, excise duties remain very important instrument of fiscal and social policies in many countries.

### **3. CONSEQUENCES OF ALCOHOL EXCISE DUTIES INCREASE**

In cases of strong increase of alcoholic beverages prices on a country level, there are negative effects which have to be pointed out. Main consequences are seen in the form of increased cross border trade, domestic alcohol production and consumption of alcohol which is determined for medical or industrial usage, or in the form of completely illegal activities such as smuggling [9]. As an example, budget losses which occurred on EU-15 level in 1996 due to illegal activities are estimated to the amount of 1,5 B EUR [10]. Bearing all this in mind, it is a strong necessity to envisage an effective system of control over the cross-border trade in order to decrease effects of smuggling of alcohol between countries. This can be a particularly tricky issue for countries with long borders with neighbouring countries, especially if these borders are also boundaries of supra national bodies or organisations such as European Union borders with third countries. Furthermore, country borders which are difficult to access and control due to their geological properties and remoteness present additional problems in effective control of cross border trade or smuggling activities. This is very prominent in mountain regions, which are quite often remote and not easily accessible by car or some other type of transport due to lack of infrastructure.

Another key thing to point out is the fact that generally, countries have different tax policies toward different types of alcoholic beverages. This is prominent in European Union, where many Mediterranean countries have very low or even zero tax rates on wine, because they are protecting domestic wine industry, and in the same time quite high tax rates on spirits [11]. Moreover, all these discrepancies are aligned with European Union directives and guidelines regarding alcohol taxation. With such alignment, it is difficult to perform any systematic tax policy related to control of alcohol consumption within population, because consumers can easily



avoid higher taxes on spirits or beer and replace them with more quantity of wine, either in their home country or neighbouring country. Directive 92/84/EEC prescribes minimum excise duty rate for spirits at 550 EUR per hectoliter of pure alcohol, for beer at 1.87 EUR per hectoliter of finished product, but wine and sparkling wine have a minimum rate of zero EUR per hectoliter of finished product [11].

Bearing this in mind, it is impossible to envisage successful tax policy which aims to reduce or restrain consumption of alcohol due to complete ignorance of substitution effect. If there is a huge price increase of certain good or service, it should be expected that consumers will try to purchase other goods or services of similar qualities, but with lower price. If policymakers have a goal to reduce consumption of certain goods or services, then it is reasonable to make sure that all goods or services of the same qualities or type are treated the same, without giving preferential status to some particular subtypes of goods or services. In this particular case, if there is an intention to reduce consumption of alcoholic beverages, then it is necessary to treat equally or very similarly all beverages that are encompassed under definition of alcoholic drinks.

To sum it up, all drinks that contain the substance of alcohol should be treated equally regarding taxation policy. Current situation regarding excise duties on alcoholic beverages in European Union is not balanced because wine is treated preferentially with respect to other types of alcoholic beverages. Possible reasons of preferential wine status could be found in the support of domestic wine industry, but that is completely in collision with the goals of reducing alcohol consumption and already mentioned health and social policies.

#### **4. PROBLEMS WITH ALCOHOL CONSUMPTION MEASUREMENT**

When evaluation efficiency of alcohol related policies, it is very important to be able to correctly measure amounts of alcoholic drinks which are consumed in a given period of time in a given country. Thus, two main approaches were developed - measuring alcohol consumption through retail sales data or through surveys.

Retail sales data are considered more accurate in terms of estimating how much alcohol was consumed by the population in a given year, because governments monitor sales data for tax collection purposes, and these can be obtained from government publications or agencies. However, these data are still limited because they cannot show how much alcohol was home-brewed or the magnitude of alcohol smuggling activities, since these cannot be visible from retail sales data. Moreover, retail sales measures are usually focused on measuring how much alcohol was consumed in a country during a year, thus it is impossible to determine how much alcohol consumed natives or tourists in a given year.

On the other hand, measurement through surveys offers few unique benefits. First, they can distinguish between abstainers and the people that are actually doing all the drinking. Moreover, survey data have the ability to compare various sub-populations of interest defined by socio-demographic and other individual level characteristics and potential to assess drinking patterns which cannot be done through a measurement using retail sales data, however, in surveys people tend to underestimate their level of alcohol consumption, and are generally unwilling to admit their real level of alcohol intake, since that is a rather sensitive, delicate and private matter [12].

## 5. CONCLUSION\*

Consumption of alcohol remains huge health and social issue in many countries, especially in the European Union and in countries which emerged after Soviet Union collapse. However, there are no easy solutions available in order to effectively reduce alcohol consumption and alcohol related harm. This is mainly due to inability of efficient monitoring of alcohol production, effective monitoring of cross border trade and prevention of smuggling on an international scale. Even in European Union, countries have different laws regarding taxation of alcoholic beverages, and that also somewhat hinders the ability of alcohol taxation policies in certain countries due to many alternatives that are available to consumers of alcoholic beverages.

Furthermore, additional problems are present with measurement of alcohol consumption, since retail sales data cannot give precise information regarding drinking patterns within population or magnitude of smuggling activities, and surveys are vulnerable to underestimation of alcohol consumption by respondents due to sensitivity of questions related to alcohol consumption. To sum it up, more synergy and cooperation between counties should be envisaged in order to achieve higher levels of efficiency in monitoring of alcohol cross border trade and prevention of smuggling activities.

Another key thing to point out is that countries of European Union need to achieve some general consensus regarding the tax status of wine. If policymakers of European Union countries are fully aware of alcohol related harm, and if they reach a conclusion that prevention of these negative health and social effects is far more important than stimulation of wine industry, than it will be necessary to abolish zero tax rates on wine within European Union, and to set tax rates on wine comparable to those on spirits or beer.

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# THE PRESCRIBED IMPRISONMENT SENTENCE AS A CONDITION FOR THE CONCLUSION OF THE PLEA AGREEMENT IN THE LEGISLATION OF MONTENEGRO

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**Abstract:** *The areas of freedom, security and justice are the norms of primary law and legal acts of secondary law in Europe, which enable the functioning of supranational and national institutions in each particular segment of this field. These norms come from different branches of law, which regulate special relations in the area of freedom, security and justice.*

*Although there is no explicit division into specific areas according to the Lisbon Treaty, the area of freedom, security and justice represents a unified whole set up in the Title of the TFEU, Article 67 of the TFEU lists some of the basic elements that constitute freedom, security and justice. Within this content section, it is appropriate to make a systematisation and division of the area of freedom, security and justice into several subcategories. This will enable a clear, simpler and more systematic insight into the norms and regulations that constitute the overall legal framework of this area. These are the norms and legislation that are interconnected, conditioned and are in active correlation and interaction with other policies at the continent level. In this context we are also considering the case of plead guilty in the Montenegrin legislation, especially in the part of the prescribed imprisonment sentence as a condition for the conclusion of the Plea Agreement in the legislation of Montenegro.*

**Keywords:** *Legislation, plea agreement, imprisonment, law, freedom, security.*

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## 1. INTRODUCTORY REMARKS

The Plea Agreement was introduced into the criminal procedure code of Montenegro in 2009.[1] This Code, which came into force on 26<sup>th</sup> August 2009, the Montenegrin criminal code was enriched by a typical Anglo-American institute. Recognizing the fact that this is a completely new institute, with which the law of Montenegro was not familiar until then, six months after the Code came into force, the provisions of the Agreement started to be applied. Thus, the Plea Agreement has been applied since 26<sup>th</sup> February 2010.

The legislator estimated that a six-month period would be sufficient for the holders of judicial functions to become acquainted with the new institute in order to successfully apply it in practice. However, it seems that the legislator made a mistake in their assessment. This is supported by the fact that seven months after the beginning of the application of this institute in the proceedings in which the defense attorney, before the main hearings, initiated the conclusion of the Agreement, it was requested the postponement of the main hearings because „the State Prosecutor has just begun to act on the application of this institute.” [2]

The institute of the Plea Agreement is regulated by the Chapter XX of the CPC. Since the adoption of the Code in 2009, until now, the provisions relating to the Plea Agreement have changed, opening even more dilemmas and questions in relation to those that emerged after the initial legal definition of this institute. However, the essence of this institute represents the conclusion

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of the Agreement between the two main actors of this procedure, which is the State Prosecutor and the defendant. Namely, by the Agreement the defendant fully acknowledges his/her guilt for one or more acts he/she is charged with, and in return receives certain benefits from the State Prosecutor. These benefits relate to a milder sentence, or other criminal sanctions to be imposed on the defendant. Also, one of the important features of this Agreement is the waiver of the right to appeal by the parties if a judgment is rendered in accordance with the Plea Agreement.

It is important to point out that the final decision on the Agreement is always in the hands of the court. Namely, although the court does not play an active role either in negotiations or in the conclusion of the Agreement, the final decision is always made by the court. The court is the only entity that is authorized to decide on the fate of the Agreement allowing it in that way to produce certain legal effects or become only a dead letter.

## **2. THE SCALE OF IMPRISONMENT SENTENCE AS A CONDITION FOR THE CONCLUSION OF THE AGREEMENT – THE ORIGINAL DECISION FROM 2009**

When the Plea Agreement was introduced in 2009 in domestic criminal proceedings, the legislator was fully cautious about it. Since it was not known how the practice would adopt this completely new procedural institute as there was no previous experience with it, its initial application was limited to criminal offences for which an imprisonment sentence of up to ten years was prescribed. Namely, in Article 300 of the current Code, it was prescribed that „in the case of criminal proceedings for a criminal offence or concurrence of criminal offences for which an imprisonment sentence of up to 10 years is envisaged, the State Prosecutor or the accused person and his/her defense attorney may propose that an Agreement on the admission of guilt could be concluded, i.e. the parties and the defense attorney may propose to the State Prosecutor the conclusion of such an Agreement.”

The Plea Agreement, pursuant to the 2009 provisions, could be concluded for a criminal offence for which an imprisonment sentence of up to ten years is envisaged, as well as for concurrence of criminal offences, provided that all such offences were committed in category of offences for which an imprisonment sentence of up to ten years is envisaged.[3] However, this provision was not the most precise one for one reason. As is evident, the number of offences that may have been the subject of the Plea Agreement is not limited. It is therefore not difficult to imagine the following situation in practice. For example, let's take into account the concurrence of criminal offences, which consist of three crimes with imprisonment sentences of up to seven, eight and nine years. With the principle of aspiration, a single sentence in this case could be prescribed between seven years and one month, up to 20 years, which is the overall maximum. Is the conclusion of the Agreement in line with this provision then, if we have in mind that a condition for concluding the Agreement is a prescribed sentence of not more than ten years? We believe that in the above example, there would be no legal restrictions on the conclusion of the Agreement.

The original ban on the conclusion of the Agreement for criminal offences for which an imprisonment sentence of more than ten years is prescribed, is simple to be justified rationally. Namely, it was a completely new institute that in practice had yet to prove its effectiveness. In addition, a large number of criminal offences were found in the permitted zone, thus the Agreement was expected to make a significant contribution to the ending of criminal proceedings at a faster rate. Also, a moderate solution of the legislator should have prevented abuses that this



institute could possibly brought about. Furthermore, the public opinion was also likely to be taken into account, so the legislator, having understood it, wanted to avoid the possibility of communicating for the most serious crimes.

The relatively mild penal policy in Montenegro, combined with the prescribed restriction, did not represent a suitable ground for reaching some high-profile rates in the application of the Plea Agreement institute. In addition, this should have not been the goal at the very beginning of the application of this new institute. In fact, the moderate caseload burden of courts is a completely satisfactory result. [3] However, as practice showed, in the first years of the application of this institute, the courts were not just relieved in terms of the caseload burden, but this institute had almost never been applied. [4] It is therefore a surprising fact that the legislator, by a later decision of 2015, decided to completely abolish the restriction in the form of a prescribed sentence and allow the conclusion of the Agreement for all crimes (except war crimes and terrorism).

### **3. VALID SOLUTION IN THE CRIMINAL PROCEDURE CODE OF MONTENEGRO**

After the initial limitation in the form of the imposed imprisonment sentence, the legislator decided in 2015 to authorize the conclusion of the Agreement for all criminal offences, regardless of the prescribed sentence. Such a decision could be considered a hasty move by the legislator, since the restriction was abolished, and the Agreement was practically not applied in reality. And many European countries abandoned the prescribed restrictions, but they did it more cautiously. Namely, the practice of European countries shows that they spread the circle of criminal offences in relation to which communication is permitted, only after the Agreement in practice had proved successful. [5] Prior to this change it was necessary to carry out a comprehensive and thorough research that would deal with the Plea Agreement in practice.

The legislator's decision to delete the prescribed limit was most likely an attempt by the legislator to „revive” this institute in practice. Since the application of the Plea Agreement in practice had almost never started, the deletion of the prescribed sentence should have increased the application of this institute, which turned out to be right. [6] This again leads us to the issue of penal policy in Montenegro. The reason for the negligible number of concluded agreements is the result of a mild penal policy in Montenegro. Namely, the defendants received low fines in the regular procedure, and therefore they did not have any reason to conclude agreements. One should not ignore the fact that the defendants often tended to delay the criminal proceedings to become obsolete, which was certainly more favorable for them than the conclusion of the Agreement.

Pursuant to the current Criminal Procedure Code, [1] the Plea Agreement can be concluded for all offences prosecuted ex-officio, with the exception of war crimes and terrorist acts. While the prescribed sentence is no longer relevant, the only constraint imposed by the legislator relates to the inability to conclude an Agreement on criminal offences such as war crimes and terrorist acts.

### **4. PLEA AGREEMENT AND CRIMINAL OFFENCES OF WAR CRIMES AND TERRORISM**

Why did the legislator choose to ban the conclusion of the Agreement when it comes to war crimes and terrorism? The intent of the legislator, when prescribing this prohibition, is completely understandable. It is clear that these are the crimes that cause inconsiderable and irrepa-

rable consequences and that the legislator, having in mind this, decided to exclude the application of the Agreement in relation to these crimes. Also, it is clear that the legislator did not want to provide any benefits to perpetrators of these crimes, probably believing that it would not be in line with the principle of justice and that such perpetrators should bear the consequences of their behavior without any convenience. However, it is not clear the criterion of the legislator based on which they narrowed the choice precisely to these criminal offences. Shouldn't the legislator, following the same logic, excluded the application of the Agreement and, for example, a crime against humanity or some other crimes considered as international crimes, or, in general, another serious crime? What were the determining factors that the Plea Agreement was forbidden only in relation to the above crimes? The Criminal Procedure Code prescribes many other crimes that are equally serious and whose consequences are also inconceivable and destructive, so it seems to us that the separation of war crimes and terrorism is not justified.

A more correct solution would be if the legislator allowed the application of the Agreement in relation to all criminal offences, or if they had already decided to exclude the application of the Agreement in relation to the most serious crimes, then it should have been done by imposing the sentence as one of the conditions for the conclusion of the Agreement. Thus, for all criminal offences for which imprisonment is prescribed greater than that set by the legislator as the upper limit, the application of the Agreement would be excluded.

## **5. RELATIONSHIP BETWEEN THE PLEA AGREEMENT INSTITUTE AND COOPERATING WITNESSES**

Another dilemma was created by the legislator's decision to exclude the application of the Plea Agreement in relation to the criminal offence of terrorism. If the legislator banned the Agreement for the criminal offence of terrorism because they considered that the perpetrator of this crime should not be given any benefits because of the nature and the weight of this crime, then it should have been consistently followed up by other provisions of the Code. Therefore, when we talk about the criminal offence of terrorism, its relationship with the Plea Agreement Institute, as well as with the Institute of Cooperating Witnesses, is very interesting.

The Institute of Cooperating Witnesses foresees the possibility that a member of an organised criminal group, that is, a criminal organisation against which a criminal complaint is filed or a criminal proceeding for the offence of organised crime (including terrorism) can be heard as a cooperating witness at the proposal of the State Prosecutor (Article 125 CPC). Then, when his/her testimony is of particular relevance for proving the criminal offence and a perpetrator's guilt, or when he/she will help reveal, prove and prevent other crimes and when the significance of his/her testimony to prove the offences and other perpetrators' guilt is more prevalent than the harmful consequences of the crimes he/she is being charged with, a member of an organised criminal group may obtain the status of a cooperating witness. This status implies that a cooperating witness, having given his/her testimony in accordance with the provisions of the CPC about a cooperating witness, cannot be prosecuted for the criminal offence of organised crime that is being conducted.

Here comes the inconsistency of the legislator. How is it possible that the legislator, on the one hand, considers it fair to forbid the perpetrator of the criminal offence of terrorism to conclude the Plea Agreement and, on the other hand, to allow him/her to be completely freed of criminal prosecution for the same offence when he/she receives the status of a cooperating witness. It is

a completely illogical decision by the legislator that the perpetrator of the criminal offence of terrorism does not have the right to benefits granted by the Agreement, but is given the opportunity to obtain the status of a cooperating witness. This could not be justified by the importance of the witness's testimony, as the testimony that he or she would give in the Plea Agreement could be of the same importance. First, in order to conclude the Agreement, the accused should have fully acknowledged their guilt, which would undoubtedly provide meaningful information. Second, in the course of the negotiations, the prosecutor could conclude the Agreement that „conditions” by the defendant's statement in which he/she would provide all the evidence that would be of significance for proving the criminal offences and other perpetrators' guilts.

Therefore, we think that the legislator has not consistently followed the idea that the perpetrators of the criminal offence of terrorism, due to the very nature of the offence, should be denied this opportunity. It even seems to us that in the spirit of justice, it would be possible to conclude a Plea Agreement on the criminal offence of terrorism, rather than the possibility of obtaining the status of a cooperating witness. This, for the reason that, in case of a Plea Agreement, the perpetrator would have to spend some time serving the imprisonment sentence that could not be released on the basis of the Agreement, except that it might have been milder than he/she would receive in the ordinary course of action. By contrast, in relation to a cooperating witness, even when it comes to the crime of terrorism, there will be no grounds to prosecute, which will result in the dismissal of a criminal complaint or the court shall render a decision rejecting the charges. Therefore, we consider that the legislator should be at least consistent in their decision, and when they forbid the possibility of concluding the Plea Agreement for the perpetrators of the criminal offence of terrorism, they should also forbid the possibility of obtaining the status of a cooperating witness when this crime is concerned.

## 6. ARGUMENTS FOR THE UNLIMITED APPLICATION OF THE AGREEMENT

Although we consider that the legislator reacted hastily to the abolition of the ban on concluding the Agreement for crimes for which an imprisonment sentence of more than ten years is envisaged, there are numerous arguments in favour of such a solution. Firstly, how is it possible to justify the decision to allow the law to conclude the Agreement only for certain criminal offences? The possibility of abuse that may have been prevented in this way is not a good reason for doing so, because abuse can also occur when entering into agreements for crimes which impose an imprisonment sentence of up to ten years. And why are the abuses of serious crimes more important than the abuses of those which are less serious?

Secondly, how shall the prosecutor be permitted to negotiate and offer benefits for certain crimes, and for another be denied? This would result in discrimination against prosecutors, depending on their jurisdiction, meaning that for some prosecutors it would be possible to conclude agreements, while others would not have this option. [5] The same argument is on the side of the defendant. While some of them would have the opportunity to negotiate with the prosecutor, others would be excluded. However, we think that this argument should not be of importance, because we consider that the defendants of different crimes should not be treated the same. Namely, the perpetrators of the most serious crimes are more dangerous to society than those who commit less serious crimes; thus, the unequal treatment of the defendants should not be one of the reasons for the unlimited application of the Agreement.

Nevertheless, a rather strong argument is in favor of the unlimited application of the Plea Agreement Institute. The essence and *ratio legis* of the introduction of this Institute into legislation is to achieve greater efficiency of criminal proceedings that take too long. Thus, it seems logical that this Agreement is most needed in the case of serious and complex criminal offences for which long/term sentences are prescribed. Solving easier and simpler cases is much more common, which means that the conclusion of agreements in these cases is not of too great significance. [7] Therefore, the question arises as to whether the Plea Agreement can achieve its purpose if its application is limited to offences of law and medium severity? Although there is opinion in the literature [8] that a Plea Agreement should have its application precisely in these crimes, some authors consider that the Agreement should not be limited, that is, they consider that the concept of negotiation should either be unreservedly accepted or completely abandoned. [9]

The strongest argument in favor of the unlimited application of the Plea Agreement must still be found in the legislator's decision that the final settlement decision always belongs to the court. Abuses that could possibly arise can be prevented by the conscientious conduct of the court. The court is solely authorized to decide on the Agreement and only depends on its decision whether the penalties agreed between the parties will be pronounced, or whether the Agreement will produce any legal effect. That is why the conscientious and fair treatment of the court is the only guarantee for the correct application of the Plea Agreement. The court must never be a mere verifier of agreements that prosecutors sign with the defendants, but in each particular case it must be guided by the interests of justice and justice. Therefore, the court must reject the Agreement every time it considers it the right decision, since the effectiveness of the proceedings must not overpower the interest of justice as an imperative of criminal proceedings.

## 7. CONCLUDING REMARKS

The Plea Agreement was introduced into the criminal legislation of Montenegro in 2009. As it was a new procedural institute, the legislator acted rather cautiously during its prescription. Thus, the initial legal solution provided first the ban on the conclusion of the Agreement for criminal offences for which an imprisonment sentence of more than ten years was prescribed. However, in 2015 the legislator decided to abolish this restriction and thus allow the conclusion of the Agreement for all criminal offences, except for war crimes and terrorism. In this paper, we analyzed the arguments *pro et contra* both legal definitions and pointed out some inconsistencies that can be found in the Criminal Procedure Code on this issue.

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# CENTRAL BANK INDEPENDENCE IN TRANSITION ECONOMY JOINING THE EUROPEAN MONETARY UNION (WITH THE CASE OF SLOVENIA)

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**Abstract:** *Legal independence of a central bank is a necessary but not a sufficient condition for actual independence. There might always be incentives to circumvent the legal framework with an aim to influence the behaviour of the central bank. That has a particular importance in transition economies. This paper sheds new light on policy choices when preparing to enter the European Union and euro area from the viewpoint of central bank independence in transition economy. The paper shows how to adjust to the legal provisions of the Eurosystem and, at the same time, achieve Maastricht convergence criteria to join the euro area.*

**Keywords:** *independence of the central bank, convergence, transition economy.*

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## 1. INTRODUCTION

I ndependence of a central bank is about the separation of monetary policy from political influences and government authorities. At least that was an idea prior to the financial crisis in 2008. The argument for independent central banks evolved mainly from the experience of the 1970s when inflation was persistently high. As a result, a consensus was reached that price stability was a common good (Draghi, 2018) and that central banks needed a clear mandate to achieve that common good. This was supported by the then theoretical and empirical evidence demonstrating that central bank independence was important in reducing inflation. Legal independence is a necessary but not a sufficient condition for actual independence (Wagner, 1999; Fischer, 1995). Cukierman *et al* (1992) found that legal independence was a key component of actual independence of a central bank while the possible void between the exact limits of authority between the central bank and political authorities can be »filled with tradition at best and by power politics at worst« (Cukierman *et al*, 1992, p.355).

Prior to financial crisis in 2008 it was considered that in a currency union such as the euro area, institutional convergence, i.e. central bank independence, is “equally, if not more, important for a successful common monetary policy in an enlarged Euroland than nominal and real convergence” (Freytag, 2003, p.1). Central bank independence was considered essential for the credibility of the monetary union. The crisis of 2008 broadened the scope of central banks’ objectives which has led to the critical voices about the independence, mandate and accountability of the central banks (Bernanke, 2010), especially in the euro area, where risks to its reputation, legitimacy and questions about democratic accountability and independence have grown (Issing, 2018). Regardless of that, formal requirements to become a member of the Economic and Monetary Union (EMU) have remained the same, as they are enshrined in the European Union (EU) treaties, and those are not easy to change. Adopting the single currency is the third stage of EMU. Treaty on the Functioning of the European Union<sup>1</sup> (hereafter: TFEU) in article 140 stipulates that the third stage involves implementing a single monetary policy in EU countries that meet specific convergence criteria.

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<sup>1</sup> See consolidated version of the Treaty on the Functioning of the European Union in the Official Journal of the European Union, C 202, June 7, 2016, p. 108, article 140. This article was numbered according to the Lisbon Treaty which amended the Treaty on European Community, where the wordings of this article were in the article 121(1), article 122(2), second sentence, and article 123(5).

## 2. INSTITUTIONAL AND LEGAL CONVERGENCE

Institutional aspects of monetary union require monetary powers, held by member states, to be exercised in a new system, the European System of Central Banks (hereafter: ESCB).<sup>2</sup> Article 4 of the Act concerning the conditions of accession<sup>3</sup> of countries that joined in 2004 stipulates that each of the new member states shall participate in EMU from the date of accession as a member state with a derogation<sup>4</sup>. All 10 countries<sup>5</sup> that joined the EU in 2004 were therefore having a status of EMU countries with derogation, which means that they were in the economic and monetary union but had yet not adopted the euro as single currency. In view of their status as member states with a derogation, the European Central Bank (hereafter: ECB) has to examine<sup>6</sup> the level of achievement of legal convergence in each of the member states and the legislative measures that had been taken or had to be taken by them with a view to achieving legal compatibility between the national legislation and the EU legislation.

The basis for assessing the level of convergence of the national legislation includes various types of independence; namely functional, institutional, personal and financial independence. Functional independence requires a primary objective (i.e. price stability) to be determined with clarity and legal certainty. Functional independence implies that the national central bank (hereafter: NCB) has the necessary means and instruments to achieve this objective, independently of any other authority. In line with that is the principle of institutional independence, as defined in article 130 of the TFEU and article 7 of the Statute of the European System of Central Banks and of the ECB (hereafter: Statute). These two articles prohibit the NCBs and members of their decision-making bodies “from seeking or taking instructions from Community institutions or bodies, from any government of a Member State or from any other body.”<sup>7</sup>

As regards personal independence, the Statute provides that the NCB statutes should provide for a minimum term of office for a Governor of five years. The Statute also protects Governors from arbitrary dismissal, by providing that a Governor may be relieved from office only if they no longer fulfil the conditions required for the performance of their duties or if they have been guilty of serious misconduct. That can possibly be reviewed at the Court of Justice.<sup>8</sup>

According to the EU legislation an NCB can only be fully independent from an institutional and functional point of view, if it has appropriate economic means to fulfil its mandate. In other words, in order to fulfil its ESCB-related tasks NCB has to be financially independent to do so and have adequate financial resources.<sup>9</sup>

<sup>2</sup> See Official Journal of the European Union, C 115, 9.May 2008, p. 167. Article 282 (1) of TFEU says: “The European Central Bank, together with the national central banks, shall constitute the European System of Central Banks (ESCB). The European Central Bank, together with the national central banks of the Member States whose currency is the euro, which constitute the Eurosystem, shall conduct the monetary policy of the Union”

<sup>3</sup> Official Journal of the European Union, L 236, 23.September 2003, p.34

<sup>4</sup> Within the meaning of article 140 of TFEU

<sup>5</sup> Poland, Lithuania, Latvia, Estonia, Czech Republic, Slovakia, Slovenia, Hungary, Malta, Cyprus

<sup>6</sup> According to the article 140 of TFEU at least once every two years, or at the request of an EU member state with a derogation, the ECB and the European Commission must report to the Council of the European Union on the progress made by the member states with a derogation in fulfilling their obligations regarding the achievement of economic and monetary union.

<sup>7</sup> ECB Convergence Report, May 2006, p. 63 (e-source)

<sup>8</sup> ECB Convergence Report, May 2006, p. 64 (e-source)

<sup>9</sup> ECB Convergence Report, May 2006, p. 64 (e-source)

### 3. ECONOMIC CONVERGENCE TO THE EUROSISTEM

Nominal economic convergence criteria to the Eurosystem, also known as the Maastricht criteria, measure key nominal macroeconomic indicators. These are price stability, soundness and sustainability of public finances, exchange-rate stability and long term-term interest rates. In terms of price stability, the convergence criterion is to achieve inflation that is not more than 1.5 percentage points above the rate of the three best performing member states. Sound public finances establishes reference value at not more than 3% of GDP for government deficit, while sustainable public finances establish reference value of not more than 60% government debt as % of GDP. The Maastricht criteria also specify the requirement on the long-term interest rate and the allowed deviation of it from the average interest rate of the three countries with the lowest inflation rates. The idea behind all these nominal Maastricht criteria was that fulfillment of the criteria would help a country joining the euro area so that the implementation of the single monetary policy can be facilitated once the country becomes a full member of the euro area.

Before 2004 some acceding Central and Eastern European (hereafter: CEE) countries already complied numerically with several Maastricht criteria (with the exception of the two years of ERM II participation). Some countries had an inflation rate below the reference value, and debt-to-GDP ratio was on average around 40%, well below 60% of GDP. Figures on fiscal deficit varied among countries and Slovenia had its deficit below 3% of GDP. Long term interest rates were falling. According to the ECB Convergence Report in 2004, long term interest rates were on a broad downward trend in the Czech Republic, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia in 2001 and 2002, moving towards the euro area level. This development »reflected mainly low inflationary pressures, market perceptions as regards EU and euro area participation and, for some of the new member states, also the growing credibility of monetary policy.«<sup>10</sup>

In spite of the decline in inflation and expectations, long-term interest rates were still quite above the level of the euro area in most acceding countries. GDP income levels in acceding countries at the time of the accession in 2004 were below those in the euro area, with GDP per capita at around 50% of the euro area average. However, the span was from 36% in Latvia to 75% in Slovenia. Capital markets of acceding countries were small, undeveloped and newly liberalised, which could make them vulnerable to financial crises or trigger excessive exchange rate volatility.

### 4. TASKS FOR CANDIDATE COUNTRIES REFLECTING TRANSITION

Candidate states had to ensure that their national legislations were compatible with the TFEU and the Statute as failure to fully ensure central bank independence is, in fact, a breach of the TFEU, which justifies bringing an action before the European Court of Justice. Adaptations which relate to the central bank independence need to become effective at the latest when the country joins EU. Requirements about legal integration into the Eurosystem<sup>11</sup> only enter into force at the moment when an EU member state adopts the euro.<sup>12</sup> National legislative provisions on monetary policy have to acknowledge that the EMU's monetary policy is the task that has to be carried out through the Eurosystem.<sup>13</sup>

<sup>10</sup> ECB Convergence Report 2004, p. 26 (e-source)

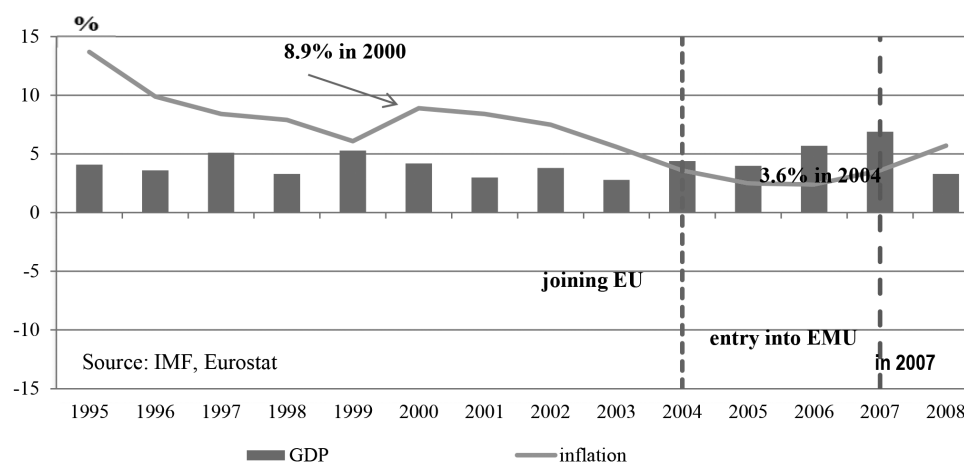
<sup>11</sup> ECB Convergence Report 2004, p.30 (e-source)

<sup>12</sup> Ibid

<sup>13</sup> Ibid

As regards legal adaptation in Slovenia, the legislation forming the legal basis for the central bank of Slovenia and its operations before joining the EU were the Slovenian Constitution and the Law on the Bank of Slovenia from 1991 which was amended in 2002<sup>14</sup>. In March 2006, Slovenia's Parliament adopted a law amending the Law on the Bank of Slovenia. As regards institutional independence, the draft law amendments clearly excluded the management of foreign reserves from the scope of Banka Slovenije's contract with the Ministry of Finance. The original law implied that the Bank of Slovenia required the agreement of the Ministry of Finance in determining matters concerning the management of foreign reserves. In regard to legal integration into the Eurosystem, the ECB recommended that the amending law on the Bank of Slovenia had some further adaptations in regard to particular inconsistencies with the TFEU and the Statute, in terms of more precise wordings, and not just of the tasks, but also in regard to economic policy objectives. The ECB was specific in its opinion on the Banka Slovenije's tasks in the implementation of monetary policy: »The wording of the proposed amendment to Article 58(2) of the Law (on Banka Slovenije's tasks after the euro is introduced) should be amended to state that Banka Slovenije 'implements monetary policy', without any reference to 'defining' monetary policy. Indeed, pursuant to Article 12.1 of the Statute, the Community's monetary policy is exclusively formulated by the Governing Council«<sup>15</sup>

ECB was also very clear in its recommendation on the prohibition of financing, as it said: «Under Article 24 of the Law, Banka Slovenije may not grant overdrafts or any other type of credit facility in favour of 'bodies of the Republic of Slovenia, of the European Union or of European Union Member States, or in favour of their regional and local authorities, and other public entities.«<sup>16</sup> The new law on the Bank of Slovenia was also to eliminate the incompatibility in terms of the single spelling of the euro so that the word *evro* was replaced by *euro* in all grammatical cases.



**Figure 1: Inflation, the main concern**

In terms of economic adaptation at the time when EU accession negotiations started in March 1998, Slovenia had the highest GDP per capita (in purchasing power standards) among the eight CEE countries, at about 67% of the EU15 average. From 1995 to 2004 the economic growth in Slovenia was about 4% on average, fiscal deficit was 0.8% of GDP and external imbalances and public debt burden were low. Current account deficit was 0.6% of GDP and public debt was

<sup>14</sup> ECB Convergence Report 2004, p.232 (e-source)

<sup>15</sup> ECB Opinion CON/2006/17 of 13 March 2006 at the request of the Slovenian Ministry of Finance on a draft law amending the Law on Banka Slovenije, p.8 (e-source)

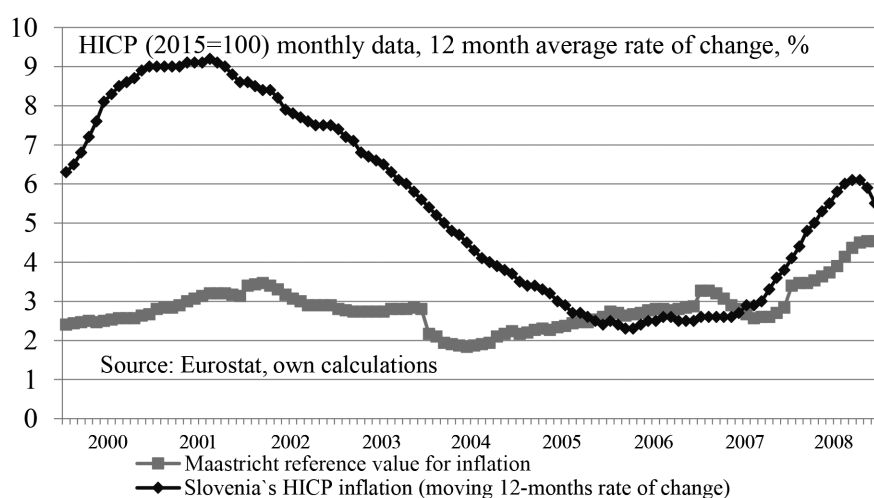
<sup>16</sup> ECB Opinion CON/2006/17 of 13 March 2006 at the request of the Slovenian Ministry of Finance on a draft law amending the Law on Banka Slovenije, p.9 (e-source)



about 24% of GDP. However, there were many structural rigidities, a legacy of the previous system. Financial contracts, wages and social transfers were indexed to inflation and the structure of budgetary spending was not flexible enough to adjust to unexpected shocks. Substantial foreign ownership in financial systems that was characteristic for all acceding countries, was the lowest in Slovenia.

## 5. CHALLENGES FOR THE CENTRAL BANK

Although Slovenia and other CEE countries made progress towards becoming a market economy before 2004, transition was not completed and further progress in institutional, structural and economic development was needed. According to the law from 1991, the national central bank in Slovenia, i.e. the Bank of Slovenia, was independent in formulating and implementing monetary policy. The main objective of the central bank at the time was to maintain the liquidity of the payment system and the stability of the national currency, tolar. In transition economies like Slovenia »the exchange rate is the natural nominal anchor, both as a source of discipline and as a guidepost for monetary policy« (Fischer, 1995, p. 18). Prior to joining the EU, an exchange rate policy of Slovenia vis-à-vis currencies of major trading partners was to pursue gradual depreciation of the Slovenian currency (see Picture 4). A formal, *de iure* exchange rate strategy was managed float, but *de-facto* since 1992 Slovenian tolar has, for most of this period, been on a moderate and smooth depreciation trend against the Deutsche Mark and, since 1 January 1999, against the euro.<sup>17</sup>



**Figure 2:** Maastricht reference value for inflation and Slovenian HICP

The strategy behind the gradual depreciation of Slovenian currency was to help Slovenia's exporters and their export competitiveness as exports of goods and services were seen as the main driving force for the Slovenia's GDP growth. It is important to emphasize that the policy of depreciation of tolar had an impact on domestic inflation, as imported goods and services became more expensive with a depreciating currency. In addition, in the then environment of Slovenia there was a need for the acceleration of additional structural reforms, such as further de-indexation, in particular of wages and some social transfers as they put pressure on inflation. For the Bank of Slovenia these and other economic policies that could influence inflation were important, including policies to continue with the liberalisation process across the economy and to strengthen policies aimed at improving competition in product markets. Since Slovenia was

<sup>17</sup> ECB Occasional paper no.10, 2004, p.15 (e-source)

experiencing capital inflows in years before EU accession, there was substantial exchange rate intervention (Lavrač, 1999) over the years prior to acceding to the EU. Exchange rate intervention was needed to maintain nominal depreciation of the domestic currency (see Picture 4).

Slovenia's participation in the ERM II had to be based on a number of policy commitments relating to pursuing sound fiscal policies, promoting wage moderation, containing credit growth and implementing further structural reforms in order to be able to tame inflation. In addition, policy of gradual depreciation of domestic currency had to be phased out upon entry of Slovenian currency to the Exchange Rate Mechanism II (hereafter: ERM II). That was a particular challenge for the Bank of Slovenia as external adjustments via nominal exchange rates are not possible in a monetary union and that is tested while the domestic currency is in ERM II. Losses in competitiveness could not be corrected through devaluation of the currency. Keeping the central rate of Slovenian tolar vs. euro within the permitted fluctuation bands while in ERM II for two years without severe tensions was the most important challenge for the Bank of Slovenia.

## **6. POLICY STRATEGY IN SEARCH FOR THE BEST SOLUTION IN SLOVENIA**

Applications of TFEU provisions on exchange rate stability focus on the exchange rate being close to the ERM II central rate while also taking into account the absence of severe tensions. That implies<sup>18</sup> examining the degree of deviation of exchange rates from the ERM II central rates against the euro; using indicators such as exchange rate volatility vis-à-vis the euro and its trend, as well as short-term interest rate differentials vis-à-vis the euro area and their development; and considering the role played by foreign exchange interventions.

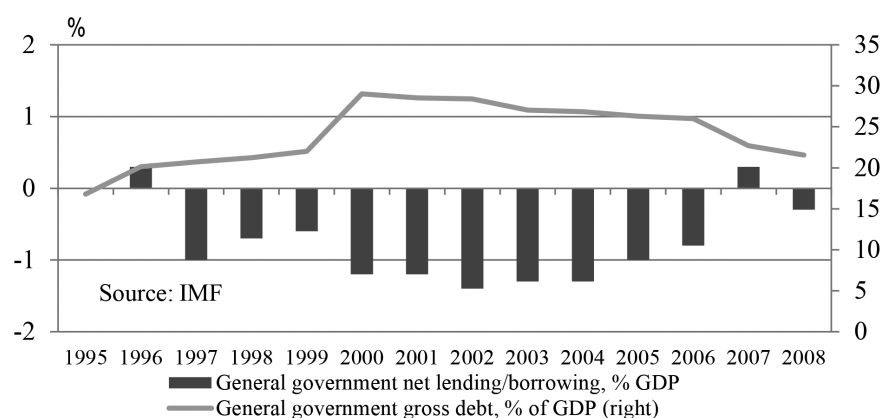
Slovenia decided for early adoption of the euro. An important condition for Slovenia to enter the euro area as soon as possible was to comply with the Maastricht criteria during the period when the tolar would be in ERM II, which was envisaged for 2005-2006. Slovenia's monetary policy had to start with progressive fading of the policy of the exchange rate depreciation so as to embark on a disinflation process in the pre-ERM II phase and to reach relative stability around the central parity of the exchange rate in the ERM II phase.

The exchange rate of the Slovenian tolar while in ERM II was to be exposed to the effects of the market, especially free flow of capital because capital controls had to be abolished. In addition, privatisation of state assets would affect the exchange rate and to maintain its stability in the environment of such movements, the cooperation of the government was needed. After planned entry of Slovenian tolar ERM II in June of 2004, the Bank of Slovenia was expected to consistently ensure coverage of differences between interest rates in Slovenia and in the eurozone and ensure a stable exchange rate vis-a-vis the euro. It was concluded that the central bank probably could not always achieve the desired level of monetary policy restrictiveness necessary to control inflationary pressures. Therefore, Slovenia's policy makers committed to coordination and signed the action plan of the Slovenian Government and the Bank of Slovenia. The action plan, i.e. the Programme for ERM II Entry and Adoption of the Euro (hereafter: the Programme), determined that »the Bank of Slovenia and the Slovenian Government have adopted the goal of lowering inflation«<sup>19</sup>. That goal was further defined as lowering inflation to the level that is in line with the Maastricht criterion, which envisaged that year-on-year inflation had to fall to 2.9% by mid-2005.

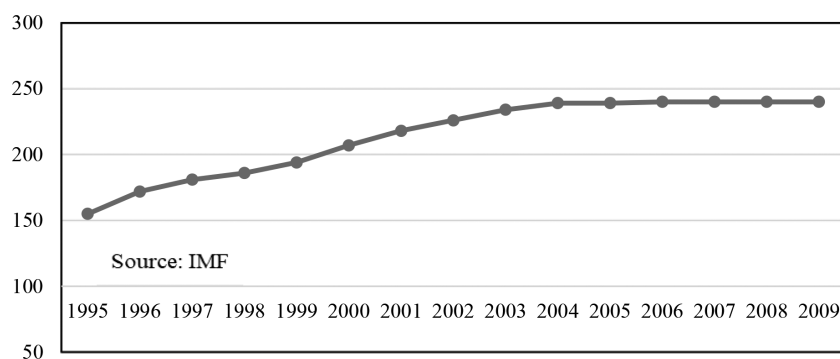
<sup>18</sup> See ECB Convergence Report 2004, p.11 (e-source)

<sup>19</sup> See Banka Slovenije, Vlada Republike Slovenije: Programme for ERM II Entry and Adoption of Euro,

The programme's aim was to neutralize negative effects of the structural shocks and large foreign financial inflows on inflation. The government committed to reverse the rising trend of its spending and stop the deterioration of the fiscal balance by policy changes. The government also committed to prevent the effects of tax and administrative measures by allowing directly and indirectly administered prices to rise only up to the maximum inflation rate. Through implementation of structural reforms, the government could also help to introduce policy changes pertaining to competition in sectors that were not enough opened to competition. All this would help the Bank of Slovenia to stabilise the tolar exchange rate and bring down inflation, the key indicator that was considerably exceeding Maastricht criterion for inflation. The Programme envisaged that the Bank of Slovenia would, prior to entering ERM II, conduct monetary policy so as to accommodate the goal of nominal convergence in »simultaneously determining movements in nominal interest rates and the exchange rate«<sup>20</sup>. The central rate for the Slovenian currency was set at 239.64 tolar per euro, which was the market rate at the time of entry into ERM II. A standard fluctuation band of  $\pm 15\%$  was adopted around the central rate.



**Figure 3: Fiscal policy stance**



**Figure 4: Exchange rate of Slovenian tolar (SIT) vs euro**

Following ERM II entry on 28 June 2004, ECB in October 2004 concluded that »monetary policy of the Bank of Slovenia was oriented towards a relatively stable euro exchange and phasing out the gradual depreciation of the tolar vis-a-vis the euro«<sup>21</sup>. Banka Slovenije used its foreign exchange swap facility<sup>22</sup> to maintain the stability of the euro-tolar exchange rate while keeping domestic

November 2003, p. 35 (e-source)

<sup>20</sup> See Banka Slovenije, Vlada Republike Slovenije: Programme for ERM II Entry and Adoption of Euro, November 2003, p. 36 (e-source)

<sup>21</sup> See ECB Convergence Report 2004, p. 19 (e-source)

<sup>22</sup> See ECB Convergence Report 2006, p.9 (e-source)

interest rates above those in the euro area. This policy, which translated into a high short-term interest rate differential with the euro area, facilitated the disinflationary process. The disinflation process in Slovenia gained momentum and inflation gradually came down to 2.5% in 2005.<sup>23</sup>

The Slovenian tolar participated in ERM II for around 22 months (from May 2004 to April 2006), i.e. for less than two years prior to the examination by the ECB in May 2006. The ECB then concluded that »Slovenia did not devalue its currency's central rate against the euro on its own initiative and managed to maintain the tolar close to its central parity, while keeping domestic short-term interest rates above those in the euro area. Banka Slovenije contained the volatility of its currency at very low levels by using its foreign exchange swap facility. In order to reduce the amount of accumulated swaps outstanding outright purchases of foreign exchange were occasionally made, implying overall significant net purchases of foreign exchange to absorb potential upward pressure on the currency. »<sup>24</sup>

## **7. WHAT ABOUT DE-FACTO CENTRAL BANK INDEPENDENCE UPON EMU ENTRY?**

Central bank independence implies monetary policy to be free from government's influence. However, even the most independent central bank does not operate on another planet. In small countries central bankers and government officials can meet formally and informally at various events, conferences and meetings where they can discuss monetary and fiscal policy.

In order to achieve conditions to join the euro area, the central bank and the government of Slovenia decided to work together, as defined in the Programme: »coordinated implementation of the Government's fiscal and other policies and the monetary policy of the Bank of Slovenia; coordinated management of the proceeds from the sale of capital investments to nonresidents; the Bank of Slovenia and the Government informing each other about all movements and developments which could have an impact on the effective implementation of the joint programme for adoption of the euro; the Bank of Slovenia and the Government jointly seeking opportunities to deal with the effects of the tolar and foreign currency liquidity made available through Bank of Slovenia instruments for public debt management without increasing the level or costs of the public debt.« (Programme, 2003, p.8)

The government of Slovenia and the Bank of Slovenia in their joint endeavour aimed at reducing inflation below the reference value of the Maastricht criterion by stabilizing the tolar's exchange rate as the key policy. While Bank of Slovenia's task was to work on monetary and exchange rate policy, the government focused on prices that it could control, such as administered prices and counter-cyclical adjustment of excise duties on fuels. The government also focused on policies aimed at de-indexation and wage constraint in the public sector. The result of the collaborative government-Bank of Slovenia project worked so that the convergence criterion for inflation was fulfilled and Slovenia joined the euro area on 1<sup>st</sup> January 2007.

Comparing this joint government-central bank strategy with the legal adaptation requirements Slovenia had to enforce to ensure the legal compatibility with TFEU and the Statute by the date

<sup>23</sup> See ECB Convergence Report 2006, p.9 (e-source)

<sup>24</sup> See ECB Convergence Report 2006, p.10 (e-source)

of the accession, one could conclude that the Bank of Slovenia was not an independent central bank prior to joining the EU and EMU, strictly speaking. However, was working together with the government a setback for the central bank independence from the legal point of view? No, because »legal independence provides a guarantee neither of actual independence nor of superior inflation performance« (Fisher, 1995, p.3) and because »in an ideal world monetary and fiscal policies should be coordinated whereas the essence of an independent central bank is that monetary policy decisions should be made independent of fiscal decisions.« (Fischer, 1995, p.5).

In line with the above it could be argued that the joint strategy between the government and the Bank of Slovenia was done »in the first best world« where »all policy makers act at all times for common good, upon which there is widespread agreement«. (Fischer, 1995, p.5).

## 8. CONCLUSION

The basic idea about economic convergence within the EU framework was to narrow differences among countries on a macroeconomic level. It was believed that monetary union would provide more macroeconomic stability in member states. In order to qualify for EU membership, accession countries had to make their central banks legally independent. The requirement to adapt national legislation to be in line with the TFEU and the Statute was theoretically justified by the political nature of inflation processes. It was only inflation from the Maastricht criteria that Slovenia had not reached prior to entry to ERM II, a »waiting room« before adopting the euro. So, the Slovenian officials' policy choice was to choose the appropriate nominal anchor (central parity of the exchange rate) that would help control inflation from the external monetary relations' point of view. However, the central bank of Slovenia could not stabilise inflation just with its own policy options, it needed the help of the government.

Slovenia's example of joining the euro area provides an interesting insight into how a transitional economy, joining the monetary union, can comply with the Maastricht criteria. First, cooperation and coordination between the central bank and the fiscal authorities can help fulfil the Maastricht criteria. Second, cooperation between the central bank and fiscal authorities may possibly require a significant change of the fiscal policy, in particular if fiscal deterioration reaches such a state that it also jeopardizes inflation and interest rate targets. In relation to that, a tight interplay between monetary policy and fiscal policy can be essential. In the case of Slovenia, the redesign of fiscal policy towards stricter support of monetary policy was very important. Third, a joint determination can do wonders. Even if fiscal policy needs some additional modifications in the preparation phase before entering the euro area, the joint determination of commitments and coordination between the government and central bank can result in an efficient and controllable process of adopting the euro.

However, financial crisis in 2008 revealed some warning facts that can be also explained by Slovenia's case. Even though the country fulfilled nominal convergence criterion on inflation and joined the euro area on 1st January 2007 as the first CEE and ex-communist country, Slovenia's inflation immediately shot up after entry into the euro area and on average in 2007 reached 3,8% for the whole year. Slovenian HICP in the first quarter of 2008 even reached 6,5%, the highest in the euro area. Secondly, Slovenia was one of the countries that was hit the hardest with the crisis that started soon after Slovenia joined the euro area, at the end of 2008. Slovenia's GDP fell by 7,8% in 2009. Both facts raise questions if Maastricht convergence criteria is relevant in the new world, much different from 1992 when the Maastricht treaty was signed. Nominal



convergence criteria might not be an adequate measure for sustainable convergence. Slovenia's case shows that adapting national legislation to adjust to EU laws on institutional independence of the central bank does not guarantee low inflation after entry to the euro area. That is contrary to the popular belief that "increased central bank independence tends to improve inflation performance" (Loungani and Sheets, 1995, p.22) in transition economies.

Also, the question is how useful and sensible the concept of central bank independence is today in that respect considering economic environment of today. Criticism has been growing and demanding redefinition of central banks' mandate in order to make them more transparent and accountable.

Considering the new »normal« since 2008 in monetary policy making with ECB measures that were, in fact, in subtle ways de facto acts of fiscal policy, the comfortable conclusion can be that even the »most independent central bank in the world« does have a creative understanding of its own actions and its own compliance with its status of independence in pursuit of its narrow objective of price stability. The most important conclusion is pertaining to the question about how relevant the arguments about the Maastricht criteria and the legal independence of a central bank in the euro area still are, considering the consequences in the aftermath of the 2008 financial crisis.

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# TIME OBSERVANCE AND PRODUCTIVE PERFORMANCE OF CIVIL SERVANTS: POLICY IMPLICATIONS

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**Abstract:** *This study is about time observance and productive performance among employees in the selected city governments in the Philippines. Principally, it attempts to determine if performance of employees is influenced by time observance. Specifically, it is concerned with the level of productive performance among civil servant respondents (n=1,142) as gauged by the attainment of targets and performance rating, the influence of time observance to productive performance, the time-related problems encountered by the civil servant respondents; and lastly, the suggested solution to the time related problems encountered by the respondents. This study utilized the qualitative, descriptive method that employed primary data. A structured questionnaire has been used to explore the set of variables proposed in this study as they apply to local situations. The present study explored the Filipino concept and utilization of official time and how this bears on the performance of their official function. The results of the study concur that in dealing with employees, one must consider individual's idiosyncrasy. In the case of the small minority of sampled employees whose time observance had been marked by tardiness and absenteeism, supervisors must make it their responsibility to observe them individually so that appropriate solutions can be applied. The 90 percent of the sample who were punctual among the respondents does not pose as a problem insofar as punctuality is concerned. To reinforce the positive behavior of this group and to provide encouragement of the small minority who came to the office either tardy or absent, inculcation on the benefits of wise use of mandated time must be done.*

**Keywords:** *Time observance, productive performance, civil servants, policy implications.*

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## 1. INTRODUCTION

Throughout the history, professionals have seen the importance of time orientation, a system of complying to the prescribed standards of the company.

“Time is Gold”, the saying goes. This is heavy with implication for people who are conscious of their time. Time is a resource that is both necessary and indispensable. It is one thing that man cannot do with. “It is”, Drucker (1967) describes, “the one truly universal condition”. As to time in an organization, it connotes that it is the most valuable commodity.

Such that time is totally irreplaceable, it has to be properly utilized to make advantage of its optimal value. To the extent that man is able to manage his time determine his success or failure not only as a business individual but also as a human being (Mc Cay, 1959).

As Hall and Hirsch (1982) has observed, time management is one great paradox. People complain about not having enough time yet it is all they have. As Sison (1994) emphasizes, time itself is not the problem, but how it is being utilized.

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The proper observance of office time is a primary indicator of performance. It does not only result to an increase in the volume of output being produced; it enhances organizational efficiency as well (Andreas, 1981, 1993). Indeed, as Kettinger notes, “management needs more than men, materials and machines to make profits. It needs a system which prevents the waste of time and effort, that is waste of money.” (Bittel, 1991; Osborne and Gaebler, 1993; Parkinson, 1979; Sherman, Bohlander, and Chuden, 1988; and Steers, 1984).

Nowhere is this truer than in the government service, where efficiency of performance is of paramount value to the public for the people, they who make the “business of government” possible, deserve not only a responsive but also a prompt delivery of services. The Philippine Constitution mandates public offices and employees to serve the people with utmost responsibility, integrity, loyalty and efficiency (Art. XI, Sec. 1). This can only be realized when the employees report to their workstations regularly and punctually and make use of this official time for productivity.

It is then to this effect that the Civil Service Commission, which is the central personnel agency of the government, has prescribed the standard office hours for workers in the civil service. Such government hours “shall be from eight o’clock to twelve o’clock noon and from one o’clock to five o’clock in the afternoon (Executive Order 292).

Despite these official policies on government time, problems exist in government agencies. Absenteeism and tardiness continue to be common occurrences. In a survey conducted by one agency, for example, it was shown that employee absenteeism and tardiness rate was 10.16 percent. In concrete terms, this meant that 75 employees are completely absent from the office for the whole year (DOLE Manager’s Page, 1992).

When certain employees are absent, the number of personnel actually available for a given task is likewise reduced (Flippo, 1984), affecting directly the efficient delivery of public service. Tardiness, too, bears upon both the employee’s effectiveness and organizational productivity.

The slogan campaign of the Civil Service Commission “*Mamamayan Muna Hindi Mamaya Na*” (People’s interest first, not anything else) addresses the need for behavioral reforms in the bureaucracy, particularly, by which civil servants deal with the public (Mamamayan Muna, Hindi Mamaya Na! Primer). This implies prevalence of *mañana* habit in the government bureaucracy. *Mañana* habit means putting off for what can be done today (Health and Home, 1994). This is very obvious in the delays of transactions in government agencies. As they have always been, governments are known for their sluggishness and low productivity.

It is in this light that the researchers have pushed for the study related to the time observance and productive performance of government civil servants which emphasis on policy implications.

## 2. RESEACH STATEMENT

This study attempted to describe the official time utilization among employees in Marawi, Iligan and Cagayan de Oro City, Philippines and how this affected productive performance.

Consequently, it sought to answer the following questions:

1. What is the level of productive performance among sampled civil servants as a gauge in the attainment of targets and in the performance, rating adopted by their respective agencies?
2. Does time observance influence productive performance among respondents?
3. What are the time-related challenges encountered by both the subordinate civil servants and their supervisors?
4. What implications to policy do the sampled civil servants recommend to solve the time-related problems they have encountered?

## 3. LITERATURE REVIEW

While government labor and the business cycle can have negative impact on productivity, they are not, by themselves, the cause. One of the major factors that cause decline the productivity is management of time (Black, 1976; Crany, Smith, and Stone, 1992; Dale, 1989; Davis and Newstrom, 1989; and Dessler, 1978).

Supervisor has much influence on this directly and by the atmosphere he creates. The main cause of this is usually poor organization of the work, caused by the poor supervision or general management. They are largely to be blamed for they do not object to this apparent inactivity (Andres, 1983; Holley and Jennings, 1983; Leveriza, 1990; and Levesque, 1992).

Another problem that cause the delay of transactions in most government agencies is the lack of preventive measures against time wasters. As much as 25 percent of a typical supervisor's day maybe spend with people who come to the workstation and take up time. In fact, it is not the subordinates who drop in and waste the supervisor's time; it is the supervisor's peers and supervisors many of whom are executive enjoys being with, thus the subordinates tend to entertain their own visitors too thinking that their supervisors well not mind at all. (Executive Digest Vol. 6 #1, 1985).

Generally, in government offices, the most common time wasters are the visitors coming in and out of the office without appointments. This is very evident in most government agencies here in Marawi, Iligan and Cagayan de Oro City where a lot of people are gathered as if waiting for something very important. However unannounced visitors are not the only time wasters. It is common to find office desks and chairs empty in the provincial offices, cities, towns and barangays because the occupants choose to be tardy or not report at all times, or if not, the occupants are present but are just idling their time playing cards or just staring at blank walls.

Time problems as phenomena can be observed anywhere in the government bureaucracy, as indeed in any organization for that matter. And the city government offices at Marawi, Iligan and Cagayan de Oro are not exception. As to why these persists despite Civil Service rules and regulations to the contrary, it is not exactly known; as to why civil servants behave the way they do, it cannot be easily discerned; and as to the losses incurred on account of these. They must be huge.

*HO<sub>i</sub>*: Civil servants' time observance as indicated by their punctuality and actual work attendance does not influence productive performance as indicated in the attainment of target output and performance rating.

#### 4. METHODOLOGY

This study employed qualitative-descriptive-exploratory design. The present study explored the Filipino concept and utilization of official time and how this bears on the performance of their official function.

The respondents were drawn from the operating level and first line supervisors of all departments in the city governments of Marawi, Iligan and Cagayan de Oro City. The target population of the three cities was 4,522, 466 of whom were from the City Government of Marawi, 1,628 from Iligan City and 2,428 from Cagayan de Oro.

Marawi which is a component city of Lanao Sur is one of the locales of the study. It has an area of 22.6 square miles with a population of 65,000 persons more or less, a large majority of whom belong to the Meranao tribe. Islam is the dominant religion with an estimated composition of 95 percent, the remaining five percent are Christian who migrated from Luzon and Visayas as early as commonwealth period. Although Marawi is richly endowed with natural resources, it is the presence of the Lake Lanao that makes her popular in the region and throughout the nation.

On another hand, Iligan City is popularly and distinctly known by its three names. It is dubbed as the "Industrial Hub of The South"; "Pittsburgh of the Philippines"; and "City of Waterfalls". It is located on the northwest coast of Mindanao and lies on the boundary of Region X and XII. It is bounded on the north by Iligan Bay; on the south by the province of Lanao del Norte and Lanao del Sur; on the east by the province of Misamis Occidental and on the west by the province of Misamis Oriental.

As of 1955, it has a total population of 273,004 of which 31 percent are urban dwellers and 69 percent are rural settlers. It has a limited flat land along the coastline and the topography is rolling and mountainous in the hinterlands.

Another research setting is Cagayan de Oro on the other hand, known far and wide as "City of Golden Friendship". It is a valley nestled between verdant hills rolling down to Macajalar Bay. Tumbling through the heart of the valley is the Cagayan de Oro River, its acre waters reminiscent of the riches once lodged in its depth. It is located on the north by Macajalar Bay; on the south by the provinces of Bukidnon and Lanao del Norte; on the east by the Municipality of Tagoloan; and on the west by the Municipality of Opol.

From the central location along the coastline of Northern Mindanao, Cagayan de Oro serves as the center of Region X. It is the center of trade, commerce, finance, and education in the region. It is also the focal point of the Cagayan de Oro – Iligan Corridor Special Development Project (C I C – S D P). As of 1995, its total population was 421,314. It is the busiest regional capital in Mindanao. It occupies a total land area of 48,886 hectares of which 5.5 percent are utilized for urban and industry; 73 percent for agriculture; 21.5 percent for agricultural and non-urban.



## 6. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This section answers the research statements.

*The Profile of the Respondents.* The respondents of this study were employees of the City Government of Marawi, Iligan and Cagayan de Oro. The sample size of 1,291 was determined using Sloven's formula. The 133 respondents were from Marawi City, 465 from Iligan City and 693 from Cagayan de Oro City, Philippines. There were more employees handling non-supervisory position than supervisory ones. The sampled respondents were regular employees of the three cities whose salaries, fringe benefits and other compensations were determined in accordance with the strict provisions of law, circulars from the joint commission on Local Government Personnel Administration and Executive Orders from the Office of the President.

As government employees, the respondents are subject to Civil Service Rules and Regulation relative to recruitment, tenure of office, status of employment, retirement and are expected to deliver quality balances to the public.

*The level of productive performance among sampled civil servants as gauged in the attainment of targets and the performance rating adopted their respective agencies.* As reflected in the Table 1, 240 or 30 percent of the 804 respondents said that 100 percent of the daily normal workload was accomplished for most working days, while 214 or 26 percent said only 25 percent of the normal workload was being accomplished for the period of 24 months being studied. For the rest of respondents, 237 representing 29 percent accomplished 75 percent workload and 114 or 15 percent accomplished 50 percent of the daily workload in most days of the twenty-four-month periods. The study however, did not include analysis of workload compatibility with standards, so that it cannot be ascertain if these accomplishing 100 percent of target had lower load than the standard set, on those accomplishing the least percentage of completion had higher load.

**Table 1:** Distribution of the Respondents by their Attainment of Targets

ATTAINMENT OF TARGETS	FREQUENCY	PERCENTAGE
1. 25% or ¼ most working hours	214	26.0
2. 50% or ½ most working hours	114	15.0
3. 75% or ¾ most working hours	237	29.0
4. 100% or most working hours	240	30.0
<b>TOTAL</b>	----- 804	----- 100.0

*Performance Rating.* Hand in hand with attainment of targets in determining performance of civil servants sampled was performance rating. It shows that 895 or 83 percent of the respondents claimed being rated very satisfactory while 3 or 0.27 percent of the 1,077 respondents had poor ratings for the first half of the year while 931 or 86.20 percent were rated very satisfactory and 28 or 2.60 percent had the highest rating of outstanding for the second half of succeeding year. For the first half of first year, 966 or 87.10 percent of the 1,109 respondents were rated very satisfactory while 3 or 0.27 percent had poor ratings while 975 or 87.91 percent were again rated very satisfactory and 1 or 0.09 percent was given a poor rating for second half.

As observed, the city governments follow the guidelines set forth by the Civil Service Commission under MC. No. 12, s. of 1993 which establishes the agencies performance evaluation system. The system contains, among others, the basic policies, the objectives and scope, the



mechanics of its implementations and the system of rating. The overall rating consists of (70 percent) actual performance (indicated by quantity, quality and timeliness) and (30 percent) behavioral dimension (including courtesy, human relations, punctuality and attendance and initiative for non-supervisors, and leadership). Stress tolerance was added, for the supervisors.

Ideally, a planning session is held at the start of the rating period, where the supervisor and the subordinate agree on the targets for the period. While the period of rating covering 6 months is in progress, the supervisor monitors and reviews the performance of the employee such that possible reinforcements can be made if the latter is not hitting his performance targets. In practice, however, the procedure rarely takes place. As generally observed and through interviews, employees just fill up the Performance Evaluation System form, do the rating themselves and have it signed by their supervisors. Sometimes, the setting of targets and the rating itself are simultaneously done during the rating period. With this practice performance rating is assumed rather than actual. The supervisor's maybe partly to be blamed for giving a token rating even if their subordinates do not deserve it.

It should be noted that under the Performance Evaluation System, for an employee to get at least a satisfactory rating (the lowest acceptable rating), he has to meet 100 percent the standards of performance, including compliance with the behavioral aspects of his job. Taking punctuality and attendance as indicators, for example, for one to be at least satisfactory, he should not incur tardiness for at least seven to ten times during the last six months and not to be absent for at least 9 to 12 times (M.C. No. 12, s, 1993).

The preceding analysis established pattern of time observance of respondents and their performance.

***The dependency of a productive performance on time observance among respondents.*** This two sets of variables were being tested to determine relationships, to wit: punctuality and work attendance versus job performance with sub variables target attainment and performance rating. The dependency of the latter was calculated with the use of chi-square the results of which are shown in the succeeding table.

**Table 2:** Relationship of Punctuality To Attainment of Targets (n=1,142)

PUNCTUALITY	ATTAINMENT OF TARGETS									
	25 %		50 %		75 %		100 %		TOTAL	
	f	%	f	%	f	%	f	%	f	%
High	133	50.56	44	30.77	226	52.27	146	47.86	549	48.0
Average	70	26.62	39	27.23	120	27.70	76	24.92	305	27.0
Low	60	22.8	59	41.26	86	19.97	83	27.71	288	25.0
TOTAL	263	100	142	100	432	100	305	100	1,142	100

Level of Significance	Chi-Square Tabular value	d.f	Chi-square Computed	Relationship
----- .05	----- 12.59	----- 6	----- 32.10	----- Significant

On punctuality of time observance against attainment of targets among sampled employees, Table 2 shows that at significance level of .05, degree of freedom at 6, the chi-square value 12.59 and computed on at 32.10 indicates positive relationship, which means attainment of targets of sampled employees depends on punctuality of employees in arrival and departure from the

workplace and breaktime. Or said in another way, the higher the degree of workers punctuality the higher is their attainment of work targets. With this result, the formulated null hypothesis that time observance in terms of punctuality has no significant relationship with performance as indicated in attainment of target is rejected.

***The time-related problems encountered by both the subordinate civil servants and their supervisors.***

**Table 3:** The Distribution of Respondents by Challenges Encountered in the Job

PROBLEMS	Supervisory		Non-Supervisory	
	Frequency	Percentage	Frequency	Percentage
1. Tardiness of some subordinates	96	66.70	429	43.00
2. Absenteeism of some subordinates	67	46.52	378	37.87
3. Undertime of some subordinates	54	37.50	240	24.00
4. Extended Breaktime of some subordinates	53	36.80	337	33.76
5. Gossiping during worktime	52	36.11	291	29.15
6. Slowdown on Assigned Task	37	25.70	229	22.94
7. Clock watchers of some subordinates	34	23.61	141	14.12
8. AWOL of some subordinates	29	20.13	140	14.00
9. Nagging Supervisors	-	-	136	13.62
10. Inattentive Supervisors	-	-	124	12.42

The four major problems encountered were 1) Tardiness (66.7 percent) for supervisory level and (43 percent) for non-supervisory level, 2) Absenteeism (46.52 percent) for supervisory and (37.87 percent) for non-supervisory, 3) Undertime for the supervisors (37.5 percent), 4) Extended breaktime for the non-supervisor (33.76 percent). These four problems have negative implications to the organization as negative behavior per se. Employee attendance and punctuality is a stabilizing factor in any organization. According to Sison (1994), when an employee is absent or late, it affects the efficiency and effectiveness of work performance and consequently, the delivery of services to the public.

Regarding breaktime, the data affirmed the observation noted by Stahl (1983) that “the problem regarding rest period is how to control it, how to keep it from being abused by the few who are not highly motivated”. To correct the practice, of spending time for excessive breaks, Stahl (1983) recommends that the manager should look at the quality of supervision, the motivation of employees and the government insistence on reasonable standards of performance and production.

Research also attempted to identify reasons or causes of the four major problems encountered by both supervisors and non-supervisors.

***The possible policy-based implications as perceived by the respondents regarding the time-related problems they have encountered.*** The recommended solutions of both the subordinates and supervisors as respondents were mainly to minimize the occurrence of time related problems in their office such as tardiness, absenteeism, extended breaktime and undertime of some employees.

Among the frequently suggested solutions are:

1. Proper delegation of responsibility and authority,
2. Employee motivation such as encouraging them to make use of their talents and abilities, and
3. Policies and procedures must be strictly implemented and practiced. It has been noted by some of the supervisors that some of the employees are mismatched with the job. This gives affirmation that many government employees join the government service for the wrong reasons. Many have been appointed in return for a political favor.

## **7. SUMMARY OF FINDINGS**

Based on the analysis of the data, the following findings were revealed in this study:

1. Tardiness and absences are the most common time-related problems said to have been encountered by both the supervisors and non-supervisory respondents;
2. Findings show that there is a significant relationship between time observance and productive performance as indicated by their punctuality to attainment of targets and work attendance to attainment of targets. While, punctuality to performance rating and actual work attendance to performance rating shows no significant relationships;
3. 3. Among the solutions suggested by respondents, proper delegation of responsibility and authority, and policies and procedures governing time observance should be made understood by workers.

## **8. RECOMMENDATIONS**

In line with the stated findings and conclusion, the study recommends the following:

1. To reinforce the generally satisfactory time observance of civil servants and to provide encouragement to the small minority who are non-observant of time, inculcate in them the value of time use and its benefits, as the findings of this study revealed.
2. This maybe integrated in their regular meetings, or during flag ceremonies. For them to see corrected results, they should be made to set their targets on a weekly basis, monitor and divulge results also during meetings.
3. There is no proper substitute to effective supervision. The department heads and divisions chiefs are responsible for the conduct of their subordinates should realize should realize that good supervision is a prerequisite to proper office decorum. Not only were the supervisors expected to lead by serving as role models, they should also should manage and motivate their people. Perhaps it would help if the supervisors themselves would be held liable for the unbecoming conduct of their subordinates. This after all, is what command responsibility is all about.
4. It was also suggested that the city government officials of Marawi, Iligan, and Cagayan de Oro City should start looking at the motivational factors affecting the employees and efforts should be done to support these. Increasing the pay level of the city government workers might be necessary but this will not be a cure – all, unless something is done about the organizational culture too.
5. The city government of Marawi, Iligan, and Cagayan de Oro through the personnel office should implement training interventions to develop and upgrade the competencies of the supervisors and the rest of the employees.

6. Furthermore, the city government should adopt its mission statement and a supportive organizational culture should have created to rally behind this mission. This would necessarily entail “reinventing” the bureaucracy.
7. Lastly, a conduct of further researches along based on the herein concepts is highly recommended. While performance rating and time observance formed part of this study, the results tended to be hazy because the investigation on performance rating was perceptual which was discovered only after results were revealed. Conduct of the same study may be done in other national government agencies for comparative purposes. Results from the comparative analysis will hopefully provide extensive as well as in depth insight into the practices of public sector employees.
8. For a more refined approach in determining a better yardstick in measuring workload accomplishment and in-depth analysis on workload. Against standard should be adopted.

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# POLITICAL SYSTEM OF THE REPUBLIC OF SERBIA AS A BASE FOR FUTURE GENERATIONS OF INTELLECTUALS

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**Abstract:** *This work uniquely illustrates the degree of development of the political system of the Republic of Serbia since 2000 to date, with all the disadvantages and advantages. It is especially important because it will give the opportunity of comparative presentation of successful and unsuccessful attempts to reform the Serbian society, economy, culture, in the time of globalization and political legal acclimatization to world trends that are an imperative of the 21st century. The accent will be placed on the achieved level of development of the economy, political culture, social corps of society and culture in general as a unique name of all the nations of the world. It will be especially emphasized how much the Republic of Serbia has progressed today and what are the standards of further life and intellectual development in it, which is of crucial importance for the survival of young people in this region, which are the carriers of all the closest changes and social challenges.*

**Keywords:** *politics, political system, culture, economy, social status, society, youth.*

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## 1. INTRODUCTION

The political system as the main subject of the politics of philosophy deals with the essential issues in the ontological sense of the political habitat: freedom, equality, man, state, power, revolution, class struggle, law, political culture, political organizations, political relations. The second meaning has an empirical meaning. In this respect, the political system is compared to the „political order”, „political regime”, „constitutional system” (if politics is viewed exclusively in an institutionalized and normative form). To understand the policy, political system and all factors of the political system, it is necessary to know the state as a determinant and the object of the expansion of political ideology. Politics is the essence of social as well as economic relations, and it directly influences the shaping of the social situation in society. The leading German political scientist, university professor and head of the Center for Sociological Research Eferhard Holtmann (Everhard Holtmann) defines the political system as a whole body of state and non-state institutions, rules and procedures that are included in the defined operational framework of the political structure in the current processes of formulating and solving political problems, as well as preparing the implementation of general binding political decisions. What is common to all contemporary political system theorists is the claim that the political system is a complex structural-functional entity based on the interaction of society and the political order.

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## 2. POPULATION OF THE REPUBLIC OF SERBIAN AS A DETERMINING FACTOR OF DEVELOPMENT OF THE COUNTRY

According to the 2011 census, the Republic of Serbia has 7.1 million inhabitants.

**Table 1.** First census results for the Republic of Serbia and the regions

	Total number of enumerated persons	Total number of inhabitants 2011.	Total number of inhabitants 2002.	Abso-lute in-crease-fall 2011-2002.	Total num-ber of per-sons abroad	Total number of households	Total number of apartments
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Republic of Serbia	7.565.761	7.120.666	7.498.001	-377.335	29.4045	2.497.187	3.243.587
Belgrade region	1.731.425	1.639.121	1.576.124	62.997	41.719	604.134	739.630
Region of Vojvodina	1.995.679	1.916.889	2.031.992	-115.103	46.031	697.437	852.229
Region of Šumadija and West-ern Serbia	2.149.327	2.013.388	2.136.881	-123.493	98.274	665.878	902.997
Regions of Southern and Eastern Serbia	1.689.330	1.551.268	1.753.004	-201.736	108.021	529.738	748.731
Region of Kosovo and Metohija	...	...	...	...	...	...	...

**Table 2.** Population by sex and age

	Men	Women
>85	27.667	53.883
80–84	67.814	108.754
75–79	122.964	175.658
70–74	153.847	200.295
65–69	154.775	184.669
60–64	249.785	278.629
55–59	289.566	306.713
50–54	254.508	265.836
45–49	238.502	245.484
40–44	234.274	235.654
35–39	248.554	245.380
30–34	252.502	243.860
25–29	244.911	235.375
20–24	225.231	214.510
15–19	206.968	195.026
10–14	178.419	168.450
5–9	179.721	170.433
0–4	169.168	159.087

Analyzing the spreadsheet of the population census for the Republic of Serbia, we conclude that there is a higher mortality rate than birth rate, which gives negative repercussions on the overall political picture and situation in the country. Based on the data presented in Table 1, we can also conclude that there is no decrease in the population in the Belgrade region, while in all other regions there are. This tells us that in addition to the problem of declining births, we are still struggling with the principle of decentralization, which is a basic feature of the post-communist states.

From Table 2. we can also confirm the already brought conclusion - the average population is analyzed by age which is alarming and that in the Republic of Serbia it is necessary to adopt the Strategy on raising birth rates at the republic level, because such data include the Republic of Serbia in one of four [1] oldest European countries, from the aspect of the average age of the population.

**Table 3.** Total age pyramid in Serbia according to Population Census 2011

>85	81.550
80–84	176.568
75–79	298.612
70–74	354.142
65–69	339.444
60–64	528.414
55–59	596.279
50–54	520.344
45–49	483.986
40–44	469.928
35–39	493.934
30–34	496.362
25–29	480.286
20–24	439.741
15–19	401.994
10–14	346.869
5–9	350.154
0–4	328.255

From Table 3. we can conclude that according to the pyramid of the age the highest number of aged people is 55-59, which is certainly confirmed by the research of the European Statistical Office, as well as the fact that in the Republic of Serbia there are only 328 255 inhabitants between the ages of 0-4. This data also speaks in favor of urgent adoption of the Strategy for increasing birth rates, because the consequences can be alarming, if such a trend continues. A higher rate of mortality than the birth rate is a safe path to the disappearance of one nation.

### 3. LEVEL OF ECONOMIC DEVELOPMENT OF THE COMMUNITY AND POLITICAL CULTURE DEVELOPMENT IN THE REPUBLIC OF SERBIA FROM 2000 UNTIL TODAY

In 2008, the „European Partnership for Serbia” was adopted, which establishes the priorities for the application for membership in the country and 2009 Serbia is formally implemented. In March 2012, Serbia received the status of candidate for EU membership. In September 2013, the Stabilization and Association Agreement between the EU and Serbia came into force. In line with the decision of the European Council in June 2013 to open accession negotiations with Serbia, in December 2013, the Council adopted the negotiating framework and agreed to hold the first intergovernmental conference with Serbia in January 2014. On January 21, 2014, the First

Intergovernmental Conference was held, signaling the official start of negotiations on Serbia's accession." [2] The development of the political system was seen through the observation of the elections, along with the dates of their maintenance, as well as the percentage of citizens turning out, since it is important to give an overview of the state of participation of political parties in power, the periodicity of holding elections. The same is a direct indication of the degree of development of the political system of the Republic of Serbia as a parameter for determining the development of the political system in the future.

Taking into account some of the most important factors of economic development, the conclusion will be presented in the form of the influence of economic development on the political system of the Republic of Serbia.

**Table 4.** Factors of economic development

<b>Factors of Economic Development</b>	<b>Republic of Serbia</b>
Gross Domestic Product	real growth 2,8% [3]
National Income Per capita	unavailable
Public Debt	24.451.162.212 euros [4]
The Employment Rate of the Population	28,0% [5]
Saving (accumulation) Per Capita	1,283 euros [6]
Volume of Foreign Exchange	growth of 12,8% [7]

„According to the National Employment Service, total employment (including employment from employment records and regular employment) in the first quarter of 2017 was less by 2.1% of employment in the first quarter of 2016. In the period January-May 2017, total employment was less than the average employment in 2016 by 0.7%, but by 0.9% above the total employment in the first five months of the previous year. Recruitment from the employment records grows faster than employment from regular employment. In the first five months, employment with records is 4.1% higher than in the same period in 2016, while it is 2.9% higher than the average in 2016. In the first five months, employment from regular employment is at the same level as in the same period of 2016, while from the average 2016 it is by 1.6% lower. Quarterly, on an annual basis, employment from the records grew faster (6.8%) than employment from regular employment (-4%), which was not the case in previous years.”[8] Gross domestic product (GDP) shows growth of 2.7% compared to the previous year. [9]

If we observe the available data, economic development as a factor of influence on the political system of the Republic of Serbia is reflected in the slight steps of GDP growth, as well as the employment rate that is at a higher level than the other Republics with which comparisons are made in this paper. However, this does not mean that the political system is stable, given that there is a high rate of those living on the very border of poverty, as well as a large number of people who have been displaced abroad in search of employment.

An overview of the state of culture and its impact in society can be obtained by monitoring various data, such as the existence of the Ombudsperson, active and registered civil society organizations, the existence of cultural institutions, cinemas, theaters, radio and television stations, libraries, all those institutions and institutions which can enable citizens to declare their right, to apply democracy to action in society, to have a certain activity and to act on the political system. Also, only the interpretation of the nation and the programs broadcast in the media can give an image of the interest and information of the citizens, which implies their participation in the political life. As mentioned in previous chapters, the level of education of the nation, as well

as investments in science and research, is closely related to culture. Interpretation of different factors can lead to a cross-cutting of a society in one country from the aspect of culture. Society in the modern age, strives for democracy, which marks the full participation of citizens in decision making and the creation of a political system. Culture has a direct connection with all the parameters mentioned in the previous chapters, especially those listed as economic and social. A high economic and social standard would mean that citizens have an umbrella organization dealing with the field of culture, as well as material and other possibilities to be consumers of cultural content. In the case of the Republic of Serbia, the Ministry of Culture and Information, and based on the presented results of the research in this paper, does not give its maximums in operation, which is a consequence of lethargic regime policy.

#### 4. CONCLUSION

Youth mobility as the most important factor in creating better business opportunities should definitely be a priority of the National Youth Strategy. Proper implementation of objectives and implementation monitoring depends on the indicators created and the communication of all actors in its creation and implementation. With previous experiences, which should give an answer to the successful implementation of the previously adopted document of the National Strategy for Youth in 2008, which envisaged greater participation of young people in the area of mobility and information, on the basis of the documents read out and the scarce research base, we conclude that we have not seriously dealt with this topic by researching the adherence of the Strategy. The correct indicators and results come from extensive and continuous research on youth mobility as well as implementation of projects in the area aimed at improving it, also related to the share of media and information programs, the use of digital technology by young people in the territory Republic of Serbia.

Such research is almost impossible to achieve. Reports of the Ministry of Youth and Sports are the only relevant documents and those that are available, while it is very difficult to reach the research of other parties and organizations. It is clear that the Ministry has an active role in creating youth policy and that the activities contribute to improving the lives of young people in the Republic of Serbia. The problems that exist, not only in our country, but also in other European areas, relate primarily to the increased number of unemployed young people, which, as a domino effect, spreads to other areas envisaged by the previous Strategy. Insufficient mobility and youth awareness deprives them of their ability to participate actively in foreign programs, as well as acquire the skills necessary for further training and thereby reduce their chances of being competitive in the European labor market, as well as domestic ones, and overall, young people today are resisting their participation in political life and become an antipode of the political system, because the politics as such in Serbia gives rise and directs them in the opposite direction.

Through the implemented Youth Projects and Cooperation with Foreign Partners, the current research has come to the conclusion that the problem of youth mobility is mostly insufficient funds. The great barrier comes from insufficient knowledge of foreign languages, which, because of the impossibility of mobility, student exchanges, travel or volunteer engagement, could not, as a skill, continue to develop, since the opportunities for learning and the practice of a foreign language in our country are still not widespread. Knowledge of young people, in media, by insight into the programming of domestic television stations, clearly shows that we do not have quality educational programs that would give young people new knowledge and provide them with a comparative analysis of the current state and better opportunities in the future.

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# CORPORATE IMAGE AND CUSTOMER LOYALTY IN THE DENTAL HEALTH SECTOR

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**Abstract:** *The privatization of healthcare services has become commonplace nowadays. Many different marketing strategies are used during privatizations in order to reach the desired volume of customers. Among these marketing methods, it is believed that verbal marketing is effective in terms of influencing the preferences of customers. However, it seems that research in this field is not sufficient. In this context, the aims of this paper are to explore the effects of word-of-mouth marketing (WOM) and corporate image (CI) on customer loyalty (CL) in individuals who have undergone dental health-care, and to investigate certain related factors. Questionnaires were prepared as the principal data collection method for the research. The study consisted of a total of 172 respondents. According to the correlation analysis that was conducted in order to analyze the relationships between WOM promotion, CI and CL, it was found that these variables have an effective positive relationship with each other. In order to increase customer satisfaction levels and patient loyalty to health institutions, it is necessary to consider variables such as the quality of service, word-of-mouth marketing, corporate image, corporate reputation, and customer loyalty, both in terms of the basic human right to healthcare, and in terms of commercial interests.*

**Keywords:** *Word-of-mouth, corporate image, loyalty, dental health, health quality*

## 1. INTRODUCTION

According to Nielsen's latest 'Global Trust in Advertising' report, 92 percent of consumers trust recommendations made by friends and family more than advertising. Moreover, 88 percent of people trust online reviews written by other consumers as much as they trust recommendations made by personal contacts, while 74 percent of consumers identify word-of-mouth (WOM) promotions as a key influencer in their purchasing decisions. However, only 33 percent of businesses actively seek to receive reviews, despite the fact that a little can do a lot. When specific case studies were analyzed, researchers found that a 10 percent increase in word-of-mouth (off and online) promotions translated into a sales lift of between 0.2 and 1.5 percent<sup>3</sup>. Even though WOM marketing has a long history in advertising, and a number of researchers have examined how it can affect purchasing decisions, research exploring the effects of electronic word-of-mouth (eWOM) promotion is still in its early stages [1]. Traditionally, word-of-mouth marketing was spread from one person to another through recommendations, but its modern version involves both targeted efforts and naturally occurring instances where users describe their satisfaction with a brand<sup>4</sup>.

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<sup>3</sup> <https://www.nielsen.com/us/en/insights/news/2012/consumer-trust-in-online-social-and-mobile-advertising-grows.html>

<sup>4</sup> <https://www.bigcommerce.com/blog/word-of-mouth-marketing/#what-is-word-of-mouth-marketing>



The objective of this study is to investigate the effects of WOM promotion and corporate image (CI) on customer loyalty (CL) in the context of dental health services. The study focuses on the following research questions:

- How do WOM promotion and CI affect CL?
- Which of the variables has a stronger effect on CL?

By achieving these goals, this study will contribute both to the literature and to business management by highlighting the levels of relative importance of the research variables thought to have an impact on CL. Much research in the literature has been on the relationships between WOM promotion, CI, and CL, but these studies have essentially dealt with the retail sector. Our study focused on the health sector, primarily the dental health sector. The overall purpose of this paper is to contribute to the literature on CL and its antecedents.

## 2. LITARATURE

Dick and Basu defined customer loyalty as the relationship between the relative attitude toward an entity (brand/service/store/vendor) and patronage behavior [2]. Oliver described loyalty as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future...” [3: p.34]. For our purpose, we define customer loyalty as a patient’s favorable attitude toward a dental health center that results in repeat-visiting behavior. Antecedents to customer loyalty come under three categories — customer-related factors, product-related factors, and corporation-related factors. We consider customer-related factors to include WOM feedback and corporation-related factors to include CI.

WOM marketing was first characterized by Arndt [4] as oral, person-to-person communication among clients regarding a brand, product, or service, but also an organization. Buttle stated that WOM feedback can influence purchasing decisions either positively or negatively, and that negative feedback typically has a more powerful impact than positive feedback [5]. Many research findings have demonstrated that WOM promotions, such as consumer reviews, can have a significant effect on consumer behavior and purchasing decisions, as well as firm performance [6; 7]. Some studies have even identified WOM promotion as being more influential than print ads, personal selling, and radio advertising [8; 9], although Van den Bulte and Lilien [10] showed that some of these effects may have been overstated [11]. Research has demonstrated that certain factors, such as extreme satisfaction or dissatisfaction, commitment to the firm, length of the relationship with the firm, and novelty of the product, drive consumer behaviors [11]. Yeoh, Othman, and Ahmad [12] pointed out that WOM feedback has an impact on marketing strategies, whereas other researchers found an effect on consumers’ purchasing decisions [13; 14; 15], while others highlighted the importance of the source of trusted information [16; 15], and of immediate feedback [17].

Gray and Balmes defined CI as the immediate mental picture that audiences have of an organization [18]. According to another definition by Lemmink, Schuijf, and Streukens [19], “*CI is social or public knowledge or perceptions about a given company*” [20]. Considerable academic research has showed that CI has a significant role in determining consumer behavior, and is particularly important in developing and maintaining customer loyalty [21]. CI is fed by various factors, such as consumer experiences, employment experiences, company-related news and comments, the variety and/or quality of products/services, and the quality of communication by related and interacted partners [20; 21].

Eelen, Özturan, and Verlegh found that brand loyalty was significantly more strongly related with person-to-person WOM promotion than with eWOM [22]. Virvilaite, Tumasonyte, and Sliburyte investigated the relationship between WOM communication and brand equity, and found that WOM promotion had a positive relationship with brand loyalty as a component of brand equity [23]. Uslu, Durmuş, and Taşdemir explored the role of ethnicity in mobile phone purchasing decisions regarding brand loyalty and WOM feedback [24]. The results of their study showed that there were no significant differences in the WOM feedback given by German and Turkish consumers. Carpenter and Fairhurst found that the relationship between customer loyalty and WOM promotion was positive and significant [25]. In addition, they found that attitudinal loyalty serves as a mediator between consumer satisfaction and consumer WOM communication. Athavale, Banahan, Bentley, and West-Strum, meanwhile, researched the antecedents and consequences of customer loyalty to particular pharmacies [26]. They found a positive–negative linear relationship between loyalty behavior and positive–negative WOM promotion. A meta-analysis conducted by De Matos and Rossi demonstrated a significant positive effect of loyalty on WOM feedback [27]. Generally, loyal customers are more likely to give positive recommendations of a firm to reference group members than disloyal ones [28]. Several Turkish academic studies have showed that there is a positive relationship between certain customer-related factors (e.g., satisfaction, loyalty, perceived service quality, trust) and WOM promotion [29; 30; 31; 32; 33]. Our assumption is of a positive relationship between customer loyalty and word-of-mouth promotion.

**H<sub>1</sub>:** There is a significant and positive relationship between CL and WOM promotion.

Wang and Wu investigated the effects of CI, perceived value, and switching costs on customer loyalty in customer–provider relationships of different lengths [34]. They found that corporate image impacted customer loyalty in both newer and older relationships. Gürlek, Düzgün, and Uygur showed that CI affects CL both directly and indirectly in the extant literature, and their research findings supported those relationships [35]. According to a study by Kipkirong Tarus and Rabach, CI had a moderating effect on CL [36]. Interestingly, Andreassen and Lindestad found that CI had a stronger effect on loyalty than satisfaction did [37]. For some groups of consumers in particular, CI was the strongest driver of future intended repurchasing behavior. Moreover, analysis findings by Kaur and Soch showed that CI was an important determinant of attitudinal loyalty [38]. Lai, Griffin, and Babin tested the inter-relations between assessments of service quality, customer perceived value, perceptions of corporate image, customer satisfaction, and loyalty [39]. They argued that there was no significant relationship between CI and CL. However, Igbudu, Garanti, and Popoola posited that CI both affects loyalty and mediated in the relationship between sustainability and loyalty [40]. Their findings showed a positive effect of corporate image on customer loyalty. In academic studies whose samples were from Turkey, CI was found to have a significant effect on loyalty, satisfaction, corporate identity, and perceived service quality [41; 42; 43; 44]. Based on these findings, we have posited the following hypothesis:

**H<sub>2</sub>:** There is a significant and positive relationship between CI and CL.

### 3. METHOD

We collected data from dental healthcare patients in Hatay, Turkey. The data was collected as part of the first author's master's thesis. The convenience sampling method was used in the study, with self-administered questionnaires being utilized. We collected a total of 172 questionnaires. Each

measure had multiple items with a 5-point summated rating scale, with anchors of 1 being “strongly disagree” and 5 being “strongly agree”, except in the case of the respondents’ demographics. To measure the research variables, modified versions of previously developed scales were used.

The WOM feedback variable was adopted from the work of [31; 30; 32; 29; 45], and measured eight items. CI was measured using a scale that was adopted from [41; 43; 44], and contained five items. The CL variable was taken from [46; 47; 48], and has been commonly used in the literature.

The reliability of research constructs is sufficient according to [49: p. 24], who suggested a Cronbach’s alpha value of 0.70 or better. All the constructs had acceptable reliability scores, as can be seen in Table 1.

#### 4. ANALYSES

Of the 172 respondents, about 49 percent were female and 51 percent were male. The respondents were aged between 19 and 80 years. The average age was 36 years. The financial status of the respondents was categorized as upper (83 persons), medium (66 persons), and lower (23 persons).

Table 1 shows the means, standard deviations, Cronbach’s alphas, and bivariate Pearson correlations of the constructs.

**Table 1: Correlation Analyses**

	CL	WOM	CI	Cronbach’s $\alpha$
CL	1			.93
WOM	.540**	1		.92
CI	.899**	.600**	1	.96

\*\* $p < .001$ ; CL: Customer Loyalty; WOM: Word-of-Mouth; CI: Corporate Image

We found positive and strong correlations between CL and WOM promotion ( $r = .540$ ,  $p < .001$ ) and between CL and CI ( $r = .899$ ,  $p < .001$ ). These results showed that  $H_1$  and  $H_2$  were supported.

#### 5. DISCUSSION, CONCLUSION, AND IMPLICATIONS

This study focused on the relationship between customer loyalty and customer-related factors, such as WOM communication, and corporation-related factors, such as CI. The study explored the relationships between CL and WOM promotion, and between CL and CI in the context of dental health clinics in Turkey.

Firstly, we tested the hypothesis that there is a positive relationship between CL and WOM promotion. This hypothesis was supported. The relevant literature indicates a strong relationship between CL and WOM feedback, and therefore our finding is consistent with the academic research, whose findings emphasize the importance of WOM communication for service firms. Although the literature on the relationship between CI and CL is mixed, we found a positive relationship between the two.

This study has several limitations. The first limitation relates to the fact that direct effects between the variables were examined, but indirect, mediating, and moderator effects were not. A second limitation relates to the sampling method.

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# EVALUATION OF PUBLIC SECTOR INVESTMENT IN THE FIELD OF METAL FORMING – CASE KOSOVO

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**Abstract:** *Knowing that most of the former Yugoslavia countries are in confinement from the 1991-1999 period, production processes have stagnated a lot. Public sector investments have been oriented in road infrastructure. Knowing that many branches of the former Yugoslavia's companies for metal processing have been in Kosovo as well „Amortizatori”, „Zastava”, „Llamkos” and many others factories. Also, we must take in account the wrong policies of public sector investment. Then such an assessment would at least give an overview of the public sector's investment potential due to the failure of the privatization process.*

*The purpose of this paper is to present the possibilities of public sector investment in this field of metal forming production. The objective of the paper is to present the possibilities and give an explanation of whether it is worth investing in this sector by the public sector. Evaluation of such investments are made with benefit/cost method. This method is adapted knowing that the in benefit-cost analysis method, a project is considered positive, when the net benefit associated with it exceeds its cost.*

**Keywords:** *Public sector, metal forming, investment, benefit- cost method.*

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## 1. INTRODUCTION

The Government's investment mission in the public sector is not intended to benefit the government, but the purpose of these investments would be how much the people benefit from these investments. Public sector investment is very important for Balkan countries. Public sector investment policies are almost failing and this is because they are probably directed at the wrong side. Many of the deformed metal processing factories have remained unsettled, or privatizations have failed. There has never been an attempt to revitalize them by the government. Even so, no estimates were made whether these investments would be profitable without wanting to return those in state - owned enterprises or to not require government ownership of the assets. Evaluation of public projects is vital and during these evaluations the use of adequate assessment methods is also very important for these assessments. The Government of Kosovo should take into account the investments in this sector as there would be no benefits in short-term, but in long-term benefits would not be missing and at the same time in the coming years this would have an impact on budget growth.

## 2. THEORETICAL VIEW

Metal forming technology include field of robotics, welding, drawing, presses die casting, joining, sheet metal forming, presses for applications, automation, hydraulic and pneumatic systems and many other processes. Country efforts to “invest in public sector” can play a key role in raising the returns on public investment, and in ensuring that the scaled-up investment reaps

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the required economic growth, while maintaining their fiscal and debt survival [1]. Also, public capital investments have a social effect, but it depends very much on their efficiency [2].

In order to shift the reality of economic analyzes and assessments of the public sector, as well as to reduce the effects of political and other interests, an analysis model has been developed that takes the value of the benefit / cost ratio as the main parameter, and this method is known as B/C [3]. Benefit / Cost method (B/C) is the basic method of analysis for public sector projects, and developed with a view to objectively shifting the economic aspects of the public sector [3]. Decision takers in governments must choose among different project alternatives which, in varying degrees, contribute to society [4].

The basic goal and the steps of this method are shown in Figure 1.

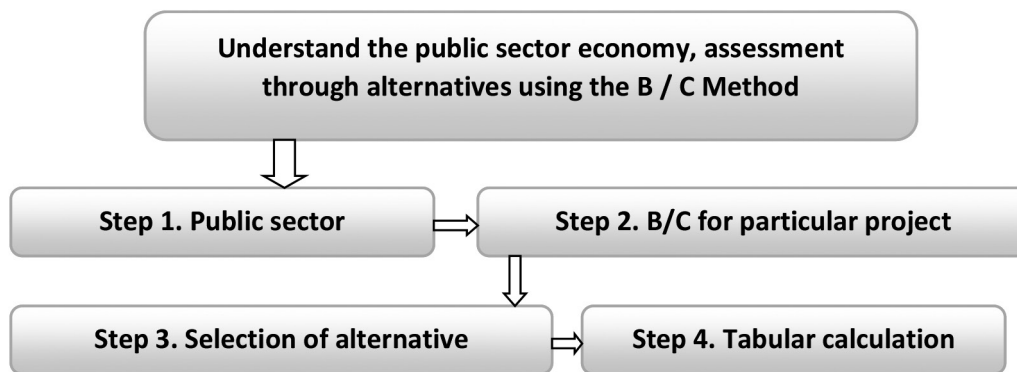


Figure 1. Basic goal of B/C method

## 2.1. Formulas and calculation

Historically, public sector projects are funded by the state sector. And those who value these projects should choose between the best alternatives. Below we will present three cases of public sector investment assessment which we will later use for our case.

First the conventional benefit-cost ratio (B/C ratio) of the project:

$$\text{Conventional } B/C \text{ ratio} = \frac{PW \text{ of benefit} - PW \text{ of disbenefit}}{\text{Initial cost} + PW \text{ of operating cost} - PW \text{ of salvage value}} \quad (2.1)$$

Conventional B/C ratio using Annual worth:

$$\text{Conventional } B/C \text{ ratio} = \frac{AW \text{ of benefit} - AW \text{ of disbenefit}}{AW \text{ of Initial cost} + AW \text{ of operating cost} - AW \text{ of salvage value}} \quad (2.2)$$

Conventional B/C ratio using Future worth:

$$\text{Conventional } B/C \text{ ratio} = \frac{FW \text{ of benefit} - FW \text{ of disbenefit}}{FW \text{ of Initial cost} + FW \text{ of operating cost} - FW \text{ of salvage value}} \quad (2.3)$$

Or in the simplest way:

$$B/C = \frac{PW \text{ benefit}}{PW \text{ cost}} = \frac{AW \text{ benefit}}{AW \text{ cost}} = \frac{FW \text{ benefit}}{FW \text{ cost}} \quad (2.4)$$

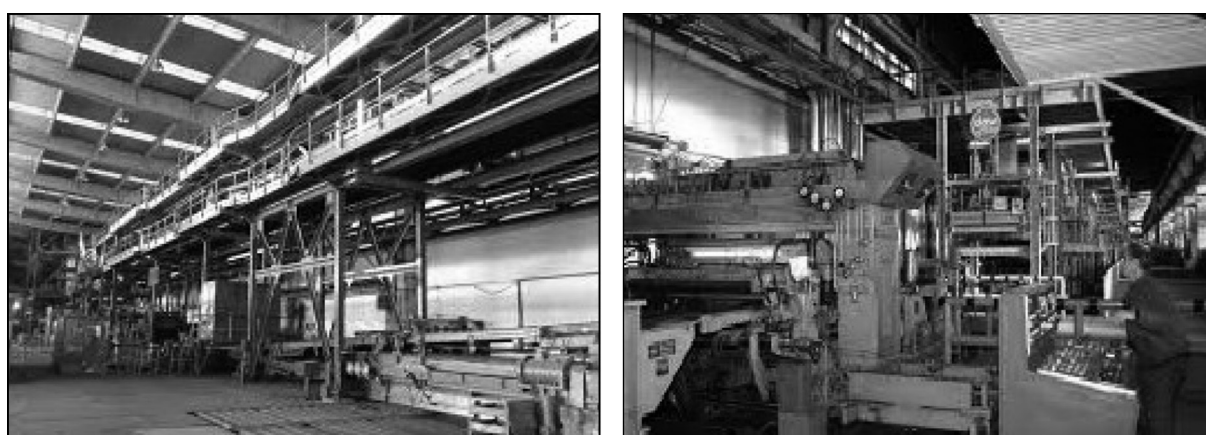
Performing benefit-cost (B/C) ratio analysis, of project:

**Table 1.** Performing benefit-cost (B/C) adapted from [5]

<i>Condition</i>	<i>Appropriate Criterion</i>
Only one investment alternative is under consideration	Invest in the alternative if the B/C ratio is greater than or equal to 1.0. Otherwise do not invest in the alternative.
Two or more investment alternatives are under consideration	Perform incremental B/C analysis. At each step, choose the higher cost alternative if the incremental B/C ratio is greater than or equal to 1.0. Otherwise choose the lower cost alternative.

### 3. METAL DEFORMATION SECTOR IN KOSOVO

The metal forming sector in Kosovo suffered a huge devastation and this is due to inadequate public property management policies. Attempts to privatize these factories are failing the cause of privatization without criteria. Of all the factories in 2000 where they were over 50, only Llamkos factory with its headquarters in Vushtrri remained.



**Figure 2.** The remaining machinery in 2000.

Privatization and the failure of revitalization would probably give the government the opportunity to invest even though recently it has been privatized. Take the example of the Zastava factory in Peja, which once employed more than 2000 workers, today after privatization has become a market. The machine that was almost new is not known where it has dissolved, and this is the wrong politics followed by the government. Then the Amortizator factory in Pristina, which once had more than 1000 employees, was sold for 7.5 million euros. Today, after privatization, there has been no investment opportunity from anyone.

### 4. B/C METHOD IN EVALUATION OF PUBLIC SECTOR INVESTMENT IN THE FIELD OF METAL FORMING

The allocation of the budget in these years in Kosovo goes only for infrastructure and nothing else, without any good for the work power. This is affecting the private sector being overwhelmed with workers and this is giving many opportunities for businesses in many misuses. Let's take the case if investments of 350 mil euros of infrastructure are reduced to 150 mil, and 200 mil go to the manufacturing sector, especially to the revitalization of these factories.

The Association of metal forming producers receive from government a fund of 200 mil Euro. This money will be distributed for 20 years by 10 mil euro. The Association uses an annual discount rate of 5% - 7%. 1.200,000 euro per year will be operational costs which will be provided by regular budget; and 800.000 € from other donors.

Aw investment costs = 200000000 (A/P, 5% - 7%, 20), Aw annual costs M&O = 1.200.000 €

Aw benefits = 10.000.000 €, Aw disbenefits = 800.000 €. After all calculation the B/C ratio is **1.0049**.

**Table 2.** Evaluation of public sector investment

Public Sector Discount Rate	5.00%	7.00%
Appraisal period (years)	20	
Capital Costs	€ 0	€ 0
Whole of Life Costs	200,000,000 €	200,000,000 €
Present Value of Benefits	127,699,656 €	109,585,335 €
Present Value of Costs	127,699,656 €	109,585,335 €
Benefit Cost Ratio	<b>1.00</b>	<b>1.00</b>
Net Present Value	€ 0	€ 0

## 5. CONCLUSION

Based on Table 1, and comparing the conditions under which an investment in the public sector can be considered acceptable and by looking at the value gained from the project evaluation, we can say that: The investment with the stated amount and the time of return of investments for 20 years would affect long-term profits. Here it is seen that the metal sector needs an investment from government. For the estimated period and the investment for the amount mentioned would bring the country a profit of 127,699,656 €. The greatest benefit would be the employment of young people. Employing in this sector would have a major impact on increasing the quality of education at faculties due to the demand of professional staff. From calculations with method B / C as well as adapting the real interest rate in Kosovo varies from (5 to 7), it is seen that we may have a change of profit but with a little higher risk.

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# AN ASSESSMENT ON THE IMPORTANCE OF HUMAN CAPITAL IN ECONOMIC GROWTH

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**Abstract:** *Even though the emergence of the human capital theory was shaped in the context of micro-economics, it was applied to macroeconomics eventually by the implementation of the microeconomic production function at the national or economy-wide level. There are several economic growth models introduced in the literature on this matter over the years by placing aggregate production function in the center of their models, which lay the foundation of studies focusing on economic development. However, development of ‘new growth theory’ particularly draw attention to the relationship between human capital and growth that is followed by the efforts aiming to bring an explanation to the differences of growth across countries by considering several possible variables of growth.*

*New growth theory attempted to bring an explanation to the process of economic growth in the long term through endogenous forces such as human capital, knowledge and information technology which also constituted the foundation of today’s modern economies. Economic growth has been linked to an increase in knowledge, quality, and diversity of human capital rather than just a cumulative increase in the labor force. Consequently, human capital has been recognized as one of the significant factors in the process of economic growth in the literature, considering its positive contribution to creating more output in growth. However, it is noteworthy to state that literature on this topic seems to constitute some weaknesses methodologically and conceptually as well as empirical researches due to revealing reverse results.*

*In this context, this paper aims to conduct a literature review to develop an understanding of the human capital concept and its importance in economic growth. Accordingly, the concepts of human capital and economic growth are analyzed theoretically by showing findings of some research in the literature on the relationship between both variables which indicated that human capital could have a significant positive impact on economic growth. As of theoretical character of the study, the paper is based on the systematic review of the literature on theories of economic growth by making use of secondary data like journals, papers, websites and various magazines as the primary sources to bring an explanation to the correlation between both variables.*

**Keywords:** *Human capital, economic growth, human resources.*

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## 1. INTRODUCTION

Human capital is a term which plays an essential role in both microeconomics and macroeconomics. With the start of the new millennium, education and human capital have strengthened its important position more and more by representing the key elements of modern economies. In this context, skill-intensive industries have been the main focus area of developed countries to be able to maintain their leadership in the world economy. Therefore, transforming to an information society has been the primary goal of the modern societies in which information and knowledge are critical inputs and outputs of almost all economic processes.

As a consequent, the interest in researches on the impacts of human capital on economic growth has increased, and it led to extensive analyzes by economists and policymakers in the last few

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decades. The first conceptual framework which describes the relationship between human capital and economic growth dates back to pioneer empiric work of Mincer [1], Schultz [2] and Becker [3], who challenged the traditional approach to human capital recognizing human capital as physical capital. This change made it possible to consider making investments in human capital through education, training, and health. It is presumed that investments in these areas will increase the output and economic growth in return. For this reason, human capital started to be recognized as one of the key elements of economic growth. Moreover, it also specified that human capital, as a vital instrument to control or influence related factors, can have an impact economic growth [4].

## **2. THEORETICAL FRAMEWORK**

### **2.1. The concept of human capital**

Origins of the concept of human capital dates back to macroeconomic development theory. In the 1950s, the main production factors were land, labor, physical capital, and management [1] - [5]. However, in the 1960s, economists had a struggle in bringing an explanation to the growth of the US economy by using the main production factors of the period [2]. The perception of physical capital as the most crucial factor of economic success was defined by empiric work of Becker [5], Schultz [2], and Mincer [6]. The underlying presumption of the human capital theory was to take people's learning capability as a comparable value with other resources of good and services production process [7].

"Human Capital" term in modern economics literature was used by Schultz first time. Spending for human capital has been defined as an investment rather than consumption by Schultz [2]. Also, the first conceptual framework, which estimates the value of assets as part of human capital, was introduced by Weisbrod [8] in the same year by integrating capital values of people into an analytical function.

The human capital theory is applied to economics first time by members of the Chicago school, Becker and Mincer. Becker's [5] model of individual investment brought an original approach to human capital theory in which human capital was taken as something similar to 'physical means of production.' Definition of making an investment in human capital according to Becker [5] is "all activities that influence future real income through the embedding of resources in people". According to Weisbrod [9], spending on education, training, information, health, and labor mobility can be counted as human capital investments.

Human capital is a complex theoretical concept which is not defined clearly while in general it refers to the people as resources and their skills that have a positive effect on their productivity [10]. According to a broad definition made by OECD [11], human capital means "the knowledge, skills, competencies and other attributes embodied in individuals that are relevant to economic activity.". Lynch [12] suggests that there are three ways of developing human capital, such as formal schooling, on-the-job training, and off-the-job training. In the future, it is expected to regain benefits of all these investments on the individuals. The critical factor of Becker's model [5] is that the main purpose of investment on education is the expectation of having higher rates of earnings in the long term by preceding time and possible gains in the of investment.

A central assumption of the human capital theory is that as a result of their investments in training and education, individuals with higher human capital will be more productive by increasing

their abilities which will also give them the opportunity of having higher earnings compared to unskilled individuals. According to remarks of Becker [5], schooling helps individuals to increase their earnings and productivity by developing their skills and knowledge, which lead to developing a better understanding of analyzing problems. The human capital concept also states that the collection of physical capital has no value without any individuals who have required capabilities to utilize the money and equipment. Legge [13] emphasizes that the success of any organization relies on the quality of the employees since the quality of output is determined by the quality of input.

## **2.2. The concept of economic growth**

In order to understand the definition of economic growth, it is necessary to define economic development as well. Economic development refers to a process of a cumulative and sustainable increase in the real national product of a national economy as a result of economic, social, quantitative, and qualitative changes. On the contrary, economic growth is related to a more limited concept [14]. In most of the time, the term ‘growth’ is associated with a quantitative increase. The most precise explanations of the growth in this context can be found, particularly in Kuznets’ writings. Kuznets [15] describes economic growth as a mainly quantitative concept, and he also emphasizes that significant progress in the theoretical analysis of growth can only be possible by putting consideration of the quantitative aspect in the center [16].

Thus, economic growth refers to a process of a quantitative increase in national income per capita centered around functional relations between the endogenous variables. It means that the definition of growth has a limitation of being bound to a particular measurement. For instance, an increase in some statistical indicators of an economy such as GDP, GNP, production capacity, are associated terms which are involved in the boundaries of economic growth concept. Therefore, in other words, while economic development gives an idea about the increase in the standard of life as a result of growth in an economy, economic growth is more about a conceptual approach regarding macro-economic indications, an increase of national economies and especially GDP per capita. Economic growth is a complex and long-term occurrence which brings along some limitations as extravagant population rise, limited resources, inadequate infrastructure, ineffective utilization of resources, unnecessary government interventions, institutional and cultural forms. In the concept of economic growth, it is assumed that the reason for changes in potential output is the changes in factors of labor and capital or increase in productivity of factors [17].

Making a mention of both similarities and differences between economic growth and economic development would help to understand economic growth concept better. Firstly, speaking of differences, economic development represents a broader perception by including qualitative changes of economy and society while economic growth approaches from quantitative aspect to economic activities. In the literature, the term of development represents a higher macro-economic level. Therefore, the term of growth is mostly used in literature for developed countries, whereas researchers refer to the term of development regarding developing countries in general. However, there are also some common similarities between economic growth and development. Firstly, they both have a stimulating impact on the economy as well as they are both constant processes. Secondly, in order to increase efficiency, allocation, and utilization of resources are both considered part of the growth and development processes. Last but not least, growth and development can create a positive impact on the standard and quality of life by contributing to their progress [14].

### 3. HUMAN CAPITAL AND ECONOMIC GROWTH MODELS

Even though the concept of human capital was initially developed in a microeconomic context, finally, it has been applied to macroeconomics as well. This relation between human capital and macroeconomics has emerged as a result of Lucas's [18] contributions particularly. In the past few decades, human capital has been the main focal point of different researches towards explaining possible sources of economic growth. In the new millennium, human capital is a prominent determinant in the economic growth of modern economies. Investments in schooling have started to be considered as a critical element of development strategies. Over the years, it is understood that it is quality of human capital, which is determined by knowledge and skills of individuals determines, that modern economies depend on in order to provide sustainable growth by increasing productivity with the help of technology as well [19].

In the growth literature of the 1950s and 1960s, the long-run growth rate had an exogenous character to the model. In the 1980s, it is clearly understood that neoclassical exogenous growth models were theoretically unsatisfactory in explaining long-growth since technological changes were not included in the model. Romer [20] tried to 'endogenize' sources of the growth by challenging the dominant concept of the period so that the growth model rate could be incorporated into the model. In this context, two different approaches emerged regarding the determination of human capital within economic growth models [33].

Importance of human capital in the economic growth process is emphasized by endogenous growth theories which are introduced to the literature by Lucas [18] and Romer [20]. They provided the main insights of today that economies can grow if they can manage to develop skills and knowledge of human capital sustainably. In other words, the reason underlies behind economic growth was not only an exponential increase in the labor force but also improvements in labor quality. Another contribution to human capital's position at present belongs to North and Thomas [21] who defined growth simply as having more educated people. An increasing labor force can be a positive factor only if workers have motivation and commitment in order to be more productive as well. Therefore, sustainable growth of an economy relies on the compensation of education, training, and productive employment. Acemoglu and his colleagues [22] also draws attention to the issue of incentives to encourage people to educate themselves and develop their knowledge.

Exogenous standard neoclassical growth model developed by Solow [30] refers to an aggregate production function as  $Y_t = F(K_t, L_t, A_t)$ . In this function,  $Y$  refers to output,  $K$  refers to capital,  $L$  refers to labor, and  $A$  refers to the index of technology or efficiency. The primary assumption of Solow is that  $F$  has a neoclassical character since it is described by 'constant returns to scale, decreasing returns to each input, and a positive and constant elasticity of substitution'. In this equation, it is accepted that a constant rate of saving and amortization is related to the evolution of the capital stock. The growing rate of labor and technology is exogenous exponential. Growth would sustain if there would only be ongoing technological progress in this model [31].

Another simple way of introduction of human capital was suggested by Romer, Mankiw, and Weil [4]. They brought a simple extension to the Solow model, which is described as a human-capital augmented Solow model. Production function seems as  $Y_t = K_t^\alpha H_t^\beta (A_t \cdot L_t)^{1-\alpha-\beta}$  [32] where  $Y$  refers to output,  $A$  refers to technology,  $K$  refers to physical capital,  $H$  refers to human capital and  $L$  refers to labor. In this extension version, human capital goes into reverse

standard Cobb-Douglas production function as a separate input with Harrod-neutral technological progress. The elasticity of output to related inputs are measured by the exponents  $\alpha$ ,  $\beta$  and  $1-\alpha-\beta$ . The main assumption is that the economy is in a steady state and the function shows constant returns to scale but diminishing returns to reproducible factors. Moreover, as similar to the Solow model, the growing of the population, and the level of technology demonstrates exogenous rates [31].

In the first approach, which is formulated by Lucas regarding the accumulation of human capital as the engine of the growth, entry of human capital into production function was quite similar to the entry of technology to the production function in Solow model. In this model, technological improvements were embedded in capital accumulation. It is assumed that two representative agents in the economy can control two variables. First variable was a level of consumption which was used to determine the accumulation of physical capital while the second variable was allocation of time between work and skill gaining which affects future productivity of an agent [18]. In this model, production function is  $Y_t = AK_t^\beta (u_t h_t L_t)^{1-\beta} h_{a,t}^\gamma$  where  $Y$ ,  $A$ ,  $K$  and  $L$  refers to output, technology, capital and labor whereas  $h$  refers to fraction of an individual's time distributed to work,  $h$  refers to human capital of the representative agent and  $h_a$  refers to average human capital in the economy. Main assumptions of the model are the level of technology is taken constant, population growth is accepted exogenous, and most importantly, recognition of human capital evolving [18].

In the second approach of the endogenous economic growth model, the primary assumption of the Solow model is still sustained, which means technological progress is taken as a key element of economic growth here as well. However, technological changes are not left unmodeled anymore by identifying technological improvements as results of intentional research and development activities in response to economic incentives. The difference in this approach gives human capital a different role by changing the entry of human capital. The entry of human capital into these models no longer become as an independent source of sustained growth, but it catalyzes technological advancement [31].

In this context, Nelson and Phelps [34] emphasized the importance of individual's level of human capital in terms of adaption to technological changes and introduction of new technologies. In other words, accumulation of human capital is recognized as an accelerating factor for the spread of technological changes and advancements. The weakness of the model of Nelson and Phelps was human capital's role was seen as just an accelerator to close the gap between advanced leaders of technology. Romer [20] developed this concept by carrying it from just the adoption of technologies to the new technology creation stage through research and development activities. However, it is necessary to have highly skilled labor, which is seen as single but the most critical input of the model. In both Romer's and Nelson and Phelps's approaches, stock of human capital is seen primary determinant of the technological advancement [27].

Romer, in his model, tried to bring an explanation to the sustainable growth of advanced countries. He endogenized technological progress by introducing a research and development sector in order to present how advanced countries could manage to maintain sustained growth. The aggregate production function in the Romer model is  $Y = K^\alpha (AL)^\beta$  while capital accumulation is  $\dot{K} = sY - \delta K$  and population growth is  $\dot{L}/L = n$ . [35]. There are three sectors in the economy of Romer's model as a final-goods sector, an intermediate-goods sector, and a research sector. Designs, in order to produce new capital goods, are done by the research and develop-

ment sector by using human capital and present accumulation of knowledge, and then they are sold to the intermediate-goods sector. The production of intermediate capital good is completed by using designs and savings of the economy which is followed by incorporation of labor and human capital in the final-goods sector in order to produce the final output [27].

#### 4. IMPACT OF HUMAN CAPITAL ON ECONOMIC GROWTH

According to the literature review, there are two ways for human capital to contribute to economic growth. Firstly, human capital can be taken as an independent factor which directly takes part in the production process and helps to create more output. In this case, we can talk about the direct contribution of human capital to economic growth by generating some output, which is described as 'level effect'. Other way draws attention to the contribution of human capital in technology through education since it can help to innovation, adoption, and diffusion of new technologies. In this way, human capital contributes to productivity growth, which is described as 'rate effect' [23].

Several types of research can be found in the literature regarding the contribution of human capital in the growth process for both developing and developed countries. First of all, Barro [24] revealed a positive effect of enrolment rates to primary and secondary school in economic growth. In the research carried out by Barro and Sala-i-Martin [25], a strong positive correlation was found out between average schooling years and economic output since average schooling years created significantly positive results on the economic output. Jorgenson et al. [26] tried to investigate sources of economic growth in the United States from 1977 to 2000 by using input-output analysis method, and they found out that investments in information and higher education were the primary determinant of economic growth.

In another research conducted by Bloom et al. [36] concerning human capital and economic growth relationship, results showed that schooling and life expectancy were two factors which contributed positively to economic growth while improving health standards at the same time. Increasing the output due to the opportunity of higher capital accumulation and higher labor productivity was another result revealed by findings of the research. Musibau and Rasak [28] researched Nigeria by applying two channels to his study to investigate the importance of human capital for economic growth through the impact of education. At first, human capital is taken as an independent factor of the production process, and the contribution of human capital on economic growth has been examined through technology. Both test channels proved that a well-educated labor force provides a significantly positive contribution to economic growth.

More recently, Zhang and Zhuang [29] investigated the effect of the human capital's composition on economic growth in the economy of China. It is reported that higher education's role in economic growth was more important than primary and secondary education. Also, the level of development and economic growth in regional level is associated with the composition of human capital. Findings of the research also showed that the outcome of higher education is more beneficial in developed countries is higher, whereas developing countries are more dependent on primary and secondary education.



## 5. CONCLUSION

Although it is possible to encounter plenty of evidence regarding human capital at the microeconomic level, it seems like there is some difficulty in finding the same wide range of research at the macroeconomic level. However, over the years, the number of researches regarding the contribution of human capital in economic growth has increased significantly for both developing and developed countries since.

As can be seen in the literature review, human capital has managed to take place in both neo-classical and endogenous growth models, and a significant role has been given to human capital concept by theoretical and empirical analyses of economic growth. Despite there is a general agreement regarding the description of human capital, there is a struggle in the process of human capital measurement. Different elements and indicators have been used by economists in order to measure human capital. Formal schooling has been one of the most common indicators that have been used in the literature as a result of Barro's efforts. This concept made it possible to bring explanations to the rapid development of developing countries, especially as well as constituting a guide to developed countries to maintain their leadership in the world economy.

Despite the difficulties and limitations on the topic, several types of research conducted in the literature showed a positive correlation between human capital and economic growth. In modern economies, for both developing and developed countries, exponential and qualitative increase in human capital is seen as a critical factor for their development through its significant positive impact on economic growth. In other words, it can be concluded that there is a strong relationship between human capital and economic growth, considering that efficient and wise utilization of knowledge and skills of people can boost the economic growth significantly. Therefore, developing a better understanding of the relation of modern economies to the quality of human capital is necessary to sustain long-term economic growth. In this context, investments in education should be taken into account carefully in development strategies as skill sets and motivation of people would be a determinant factor in the development of the economy and sustaining a healthy economic growth rate.

Finally, it is also important to point out that there are still several studies being conducted in order to improve quality of data regarding the impact of human capital in economic growth which also includes research revealing different results and reporting possible adverse effects of human capital on economic growth. Therefore, it is necessary to follow up-to-date researches closely in order to overcome methodological and conceptual issues regarding the human capital concept at the macroeconomic level.

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# LOCAL IMPACTS OF DOMINANT COMPANIES AND THE LEVEL OF DOMINANCE

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**Abstract:** *One of the most important categories of local impact studies is the investigations about the roles of a large company in the life of a small and medium-sized towns. The first part of this paper analyses this question on a conceptual, theoretical level and by the help of literature review. A systematic overview will be given on the different roles of big companies, such as in the field of economy, labour market, infrastructure, land use, traffic, local services, local taxes, demography, culture, milieu, lifestyle, politics, education, tourism and others. There can be both positive and negative side of the dominance, for example local labour market can be more stable and more vulnerable at the same time. There is a scarcity of the empirical research on these questions, mainly due to the complexity and the business secret character of some detail. The second part of the paper gives a comparative analysis about the role of Audi Hungary Company in the western Hungarian medium-sized town, Győr, which is the sixth biggest settlement in Hungary. It is an interesting test case, because the role and importance of the Audi is significantly larger than in other big companies in similar city size category in Hungary, but its weight is not extremely large in international comparison.*

**Keywords:** *local economic impact, Győr, Audi, impact analysis methodology.*

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## 1 INTRODUCTION

The role of a large company in the life of a small and medium-sized town is an important and old research area of regional economics. Both analytical and empirical sides of the various question were in the past many times examined, but the latter, empirical part is more popular, in the form of case studies. This paper amalgamates analytical and empirical approaches, as the first part analyses the question on a conceptual, theoretical level and by the help of literature review. A general overview will be given on the different roles of big companies, such as in the field of economy, labour market, infrastructure, land use, traffic, local services, local taxes, demography, culture, milieu, lifestyle, politics, education, tourism and others. The second part of the paper gives a comparative analysis about the role of Audi Hungary Company in the western Hungarian medium-sized town, Győr, which is the sixth biggest settlement in Hungary.

## 2. GENERAL IMPACT OF A COMPANY ON LOCAL ECONOMY

Companies, as any other economic units, have various and manifold impacts on local economy. The characters and intensity of these impacts are dependent from the size, nature and branch of the company. For example, impact of an assembly plant and a headquarter of a multinational company have entirely different character. Classification and examples of total local effect of

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a company is summarized in Table 1. As regards the economic effect in a narrower sense, it is classified in Table 2. Of course, it is possible to classify these effects in many other alternative ways, such as short run and long run, monetary and non-monetary, direct and indirect, tangible and intangible effects and so on.

**Table 1:** Classification and examples of the local effects of a company  
Source: Garrido-Iserte – Gallo-Rivera (2010) (modified)

<i>Local effects of a company upon:</i>	<i>Example</i>
Economy	Effects upon regional income, industrial structure, job market, labor mobility
Demography	Effects upon population growth, population structure and upon mobility
Politics	Changes in the political structure, an increase in citizen participation, improvement in the organization of political processes; lobbying
Infrastructure	Effects upon housing, traffic, healthcare services, retail
Culture	Influence upon cultural environment
Attractiveness	Influence upon the local image, local identity
Education	Effect upon participation rate, changes in its quality, partnership with vocational and university level, contacts between company and educational institutions
Social aspects	Effect upon the quality of life, influence upon the local image and identity

**Table 2:** Classification and examples of economic effects of the companies  
Source: Garrido-Iserte – Gallo-Rivera (2010) (modified)

<i>Economic effects of a company</i>	<i>Example</i>
Employment at the company	Number of jobs
Company income	Wages and salaries, social security costs, profits, taxes
Expenditures	Purchase of goods and services from local companies
Generation of business	Location choices of firms, companies
Knowledge marketing	Creation of knowledge, business atmosphere
Tourism	Tourism induced by the presence of the company

The various subsystems listed in Table 1 are directly or indirectly interrelated in different ways. For example, the increase of population due to the job opportunities generates higher consumption that has a further impact on the job market, which in turn generates feedback effects on the demographic and infrastructure subsystems. (Garrido-Iserte–Gallo-Rivera, 2010)

### 3. TWO APPROACHES OF THE LOCAL ECONOMIC IMPACT STUDIES

Professional literature offers at least two approaches to examine the role of economic entities in a local economy. According to the first – and most widespread – approach, economic impact is defined as the difference between actual economic activities (production, earnings, employment and a general business atmosphere) and economic activities assumed to exist without the given economic entity (Beck et al., 1995). The first approach shows what would happen if the given economic entity did not exist at all, how much less earnings would be made, how much less the number of employees would be and what other economic changes would be present. At the same time, these can be compared to the opportunities arising from the fact that the resources used by the given company could be utilised elsewhere. Without such a comparison, nearly all players of the economy would have a positive role and can, accordingly, emphasise their positive role in local economy, as they do have some employees and make a certain amount of earnings in the course of their activities. For example, a new assembly plant reduces the human resource available for the other businesses, and makes it more difficult or expensive for them to expand their

capacities. Grime and Starkie (1968) shows that a totally new factory contributes extremely little direct impact on the unemployment problem. Mainly former employees of existing, other firms became employees of the new firm.

In other words, the second approach takes into account, in addition to the absolute or “gross” impact, the potential production, income, employment and other impacts potentially made from alternative utilisation scenarios of the economic entity’s resources, i.e. examines the net impact – which may even be negative. However, before conducting the second approach, firstly a prior and temporary absolute investigation should be made. (Barrow – Hall, 1995; Drucker – Goldstein, 2007)

Both approaches have shortcomings: the first approach has tendency to inflate the impacts, the second one requires the use of several shaky and problematic assumptions. Due to the ideological reasons, the second type of study is extremely rare, because companies (or other actors, like universities, ports, sport clubs, festivals and so on) are not interested in such type of research. They always want to stress on their positive impacts on the local economy, therefore they are interested in the first type of studies. These are the characteristic features of studies by consultant companies and agencies made for public relation, marketing reasons or for obtaining subsidies, tax abatements or other form of legally guaranteed advantage in competition.

#### **4. TYPES OF LOCAL ECONOMIC IMPACTS AND EXAMINATION METHODS**

By the 1970s there has already been a great amount of theoretical and empirical literature on local economic impact of different economic units and how to examine them. The analyses and methods can be classified in many ways; there is no one general and unified methodology. A unified methodology cannot be formed as local businesses vary greatly in size and quality, have different structures, and they have very different characteristics and spatial relations. Completely different factors may be important when analysing an administrative unit, a paper producing company, a sport club or event, a port or airport, a prison, a university; or when a business is located in a small town with ten thousand or in a metropolis with ten million inhabitants. Research methods may also vary due to the goal of a research, as statistical data, sampling, econometric models, surveys and expert interviews are suitable to provide answers to very different research questions. Data availability may also restrict applicable methods.

Thus, this part of the paper shall not aim to standardise possible impacts and methods based on previous literature and earlier empirical works, but simply to emphasise points relevant to the analysis. This is useful because actual researches may use the same terms to describe different things, or they may operate a concept differently, or they may be analysing the very same things under different terms. At the same time some studies describe their methods and sources of data rather vaguely, which makes it difficult to analyse and generalise data.

Economic impact analysis usually describes two, three or four types of impact. Consequently, there are four general terms: direct impact, indirect impact, induced impact and catalytic impact.

1. Direct impact: output, income and jobs resulting from the investments and operation of a given economic unit.
2. Indirect impact: income and employment generated at local businesses that offer inputs for a given economic unit.
3. Induced impact: local income and employment generated by the multiplier effect resulting from spending the directly and indirectly created income.



4. Catalytic impacts: changes in local economy generated by the operation of a given economic unit. This may include increased attractiveness of investment, local image, effects on the structure and composition of local economy, impacts on workforce qualification, education, dwellings and real estate market, local services and attracting visitors. This effect might be negative if the given economic unit creates a negative image, repulses other investors and reduces local attractiveness.

In the case of three impacts, the terms of direct, indirect and induced impacts are the most frequent, and in the case of two the direct and the indirect. Classifications when only two or three types of effects are described may be criticised because they blur the line between indirect, induced and catalytic effects while they are easy to distinguish and occur through easily distinguished modes of action, or they simply disregard one of the effects. We concentrate only on direct effects, due to the availability of information.

## 5. THE LEVELS OF SETTLEMENT-COMPANY SYMBIOSIS AND THE AUDI COMPANY IN GYŐR

Settlements and companies are interrelated entities, with lots of common aims and interests. On the first extremes stand the company towns: a town established by a single company, geographically isolated. The company owns the land, builds housing, service facilities, public utilities and entirely dominates the business life of the community, as the sole employer. Acting through self-interest, the company provides and shapes the infrastructure of community. Historically this type of towns was created mainly for mining and other extractive industries (for example, Zlotoryja, Neubulach, Ilmenau, Potosi), and later, in the 19<sup>th</sup> century for a factory (for example Pullman in Illinois or DuPont in Washington). This type of development was important in the population and settlement history of USA, Canada, South Africa, Russia, Australia (Alanen, 2007; Crawford, 1999; Driscoll, 1984; Porteous, 1970) Contemporary company towns are rare, but big real estate projects are frequent. The wrong sides of these projects are obvious: vulnerability, dependency, risk, control, problems of local social life.

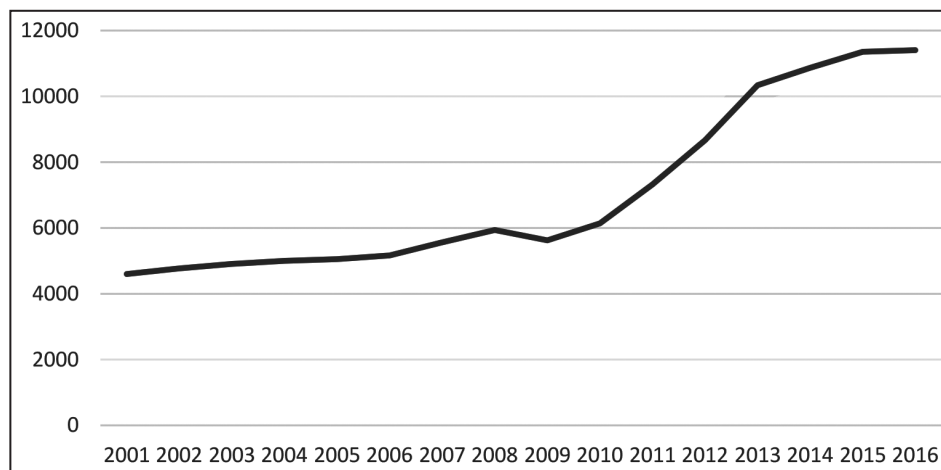
**Table 3:** The biggest companies (according to the number of employees)  
in the biggest Hungarian cities  
Source: HCSO, Bisnode Kft.

<i>City</i>	<i>Inhabitants (2015)</i>	<i>Biggest company (2015)</i>	<i>Number of employees (2015)</i>
Debrecen	203059	TEVA Gyógyszergyár Zrt.	2989
Szeged	162621	PICK SZEGED Zrt.	2571
Miskolc	158101	Robert Bosch Energy and Body Systems Kft. Robert Bosch Power Tool Kft.	3265 2090
Pécs	145347	MECSEK FÜSZÉRT Zrt.	1681
Győr	129568	Audi Hungária Motor Kft.	12015
Nyíregyháza	118058	LEGO Manufacturing Kft.	1875
Kecskemét	111724	Mercedes-Benz Manufacturing Hungary Kft.	3817
Székesfehérvár	98207	DENSO Gyártó Magyarország Kft.,	4035

On the second extremes stand the “normal” town, where first a settlement was established in the past, then a new company was established in the existing town. In this case, the interesting question is, how big and how dominant is the biggest company of the town. The eight biggest

Hungarian cities with the biggest employees can be seen on Table 3. These companies are active in industry (except Mecsek Fűszért, which is in the retail) and they have only one location.

Concentration or dominance is the biggest in the case of Győr, in West Hungary, where Audi established originally an assembly plant in 1992. The number of employees at Audi, Győr increased step by step (see Figure 1), and today it is the biggest employer of Hungary among those companies, which has only one location. (Hungarian Post, Hungarian Rail and Hungarian Oil companies are bigger in terms of the employees, but they are multilocal organizations). The ratio of the workers in the biggest company and the number of inhabitant is less than 10% in Győr, which is much less, than in other well-known examples: Wolfsburg has 120 thousand inhabitants and 60 thousand workers in Volkswagen; Ingolstadt: 127 thousand inhabitants, 44,2 thousand workers in Audi; Everett in Washington: 109 thousand inhabitants, 39 thousand workers in Boeing. There are lots of other examples in the same settlement size category, where the dominance is much bigger, and of course, as the size of settlements became smaller, the dominance can be increased even to more workers in the biggest company as the number of inhabitants of the settlement.



**Figure 1:** Number of employees in the Audi Hungária (Győr)

Source: yearly reports of Audi

The role and importance of Audi in the local society of Győr is a further important research topic. It is regrettable that we can use at this time only public materials about the company which provides very general description and therefore uninteresting, and not suitable for a deeper impact analysis. Therefore, the aim of the next step of our research will be either using interesting internal company level information or broadening the comparison with other settlements.

## ACKNOWLEDGEMENTS

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# SINO-US TRADE IMBALANCE

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**Abstract:** *The Sino-US trade imbalance has become the most difficult problem of Sino-US bilateral economic relation; it is the blasting fuse of bilateral economic and trade frictions. This current situation results in the large Sino-US bilateral trade statistical gap that leads to the wrong understanding of the scale of bilateral trade imbalance. This article plans to analyze the factors of Sino-US statistical differences from the angle of trade statistics institution under the background of economic globalization. Firstly, it makes a preliminary discussion of relative content of origin rule and analyses the influences of origin rule to the comparability of foreign trade statistics. Thus, further discuss the factors of Sino-US trade imbalance from larger scale and angles to provide beneficial references for studying Sino-US bilateral trade statistical error problems.*

**Keywords:** *Sino-US trade; trade imbalance; statistical difference; origin rule.*

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## 1. INTRODUCTION

With the rapid development of Sino-US economic and trade relations, trade imbalance is increasingly prominent and has become the important factor that influences the further development of Sino-US economic and trade relations. According to the US statistical material, China has replaced Japan and become the first trade deficit country of the US since 2000. According to China's Ministry of Commerce, China's trade surplus to the US reached 114.17 billion dollars in 2005, which increased 33.9 billion dollars than 2004; trade deficit of the US in 2007 to China was 256.2 billion dollars, which accounted for 27% of the total foreign trade deficit of the US and close to the total foreign trade deficit of the US to the Europe and Japan; the trade surplus of China to the US in 2008 was sustainable grow to 163.33 billion dollars again. The Sino-US trade unbalanced issue was raising concerns among all circles in the US. Some people of the US even attribute trade unbalance to the RMB exchange rate issue and some people think China carry out mercantilism, foster export and limit import and China should be responsible for that, so they ceaselessly clamp down China in RMB exchange rate, anti-dumping and intellectual property, which results in increasingly bilateral trade friction and conflict. While according to China, the bilateral trade unbalances scale of China and the US is far less than the statistical result of the US and the main causes are not the above reasons, the difference of bilateral trade statistical data is the critical reason that amplifies the Sino-US trade unbalance among them. The dispute of bilateral trade statistical differences between China and the US is a long-standing issue; according to the US, the deficit in commodity trade to China had started in the US since 1983 about 320 million dollars, while according to China's statistical bureau, China had been always trade deficit to the US during the 14 years from 1979 to 1992, then first trade surplus to the US since 1993 about 6.3 billion dollars; in this year, according to the data of the US Department of Commerce, the trade deficit between China and the US is as high as 22.786 billion dollars. There had been dispute when China started trade surplus to the US between China and the US. The statistical difference directly influences the judgment of bilateral trade surplus scale of China and the US. In that way, how the situation of Sino-US trade unbalance

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on earth? How big is trade gap between China and the US? In order to maintain the healthy and good development of Sino-US economic and trade relations, it is necessary to find the real factors that result in bilateral statistical differences, restore the reality of trade unbalance between China and the US and strive to seek for the solutions of solving the bilateral trade unbalance.

## 2. RULE OF ORIGIN

Rule of origin refers to the universally applicable laws, rules and administrative decisions of one country or area to confirm the origin country of commodity; the core is to determine the specific standards of commodity that is origin criterion. According to *Agreement on Rules of Origin*, the specific implement standards include: 1. Change Criterion of Tariff Classification, also known as Change Standard of Tax Item Number, which refers to that after processed and manufactured, the tax items classification number of all raw materials of the product is different from the tax items classification number of the finished product, then the processing and manufacturing place is the origin place; 2. Ad valorem percentage criterion confirms the origin place of the product according to the proportional relation between import part or inland part of the product and the value itself; 3. specific processing standard is formulated according to the manufacturing procedure of the product.<sup>2</sup>

The origin criterion is the most suitable standard that accord with principle of cross-border flow of material resources confirmed by *Concepts and Definitions of International Trade Statistics*, so now governments adopts the origin country criterion to confirm the source of commodity. Rule of origin directly decided the comparability of every country's foreign trade statistics. But there are differences in origin rule among countries that result in the huge gap of bilateral trade statistics. On the other hand, the trade statistical system based on regional statistical rules cannot reflect current international trade pattern and real trade balance situation when foreign capital and processing trade has more effect in foreign trade. Then current trade statistical systems face challenge.<sup>3</sup>

## 3. TAKE PROCESSING TRADE AS EXAMPLE TO ANALYZE THE EFFECT OF ORIGIN RULE ON SI-NO TRADE STATISTICAL GAP

### 3.1. China's export situation of procession trade

Processing Trade is a kind of trade that emerging with increasingly deepens international division of labor under economic globalization, which firstly derived from Euromerican clothing industry in the 1960s.<sup>4</sup>

However, the definition of processing trade has not been cleared and unified yet. Generally, processing trade refers to the trade form that exported after imported raw material, accessories and assembling improved parts from foreign countries.

In the past three decades, implementing processing trade was the important part of China's opening up strategy and a now road of China to boost industrialization. The processing trade featured by "large-volume import and export and put both ends of the production process on the

<sup>2</sup> Huaiqin Jia. (2004). A Summary of Sino-US Trade Balance Issues, University of International Business and Economics Press in China.P16-19

<sup>3</sup> Huaiqin Jia. (1992).Comparability of Rules of Origin and Foreign Trade Statistics, International Trade Issues, No. 11, P9-21

<sup>4</sup> Xiangshuo Yin. (2001) International Trade Course, Fudan University Press, P26-30

world market” occupied half of the country. China’s export of high capital-intensive and high-tech product was still taking processing trade as the main part, more than 75% of high-tech export come from processing imported materials trade, more than 10% of that from processing supplied materials trade. General trade took few proportions (Junyan Qi, 2008). Table1 shows that over half of export value of China’s foreign trade comes from processing trade. China’s total export is 62.1 billion dollars in 1990 and processing trade export is 25.42 billion dollars; the total trade in 2007 is 1218.02 billion dollars and processing trade export is 617.56 billion dollars; the proportion of processing trade account for total trade raise increasingly, while even more than 60% to the export of the US. So, to speak that processing trade export is a main method of China’s foreign trade export growth. While under the processing trade, a country’s export includes a large number of imports, there is specific overrate of China’s export scale under the current trade statistical method. In view of this, combine China’s trade practical activity is necessary to research the effect of processing trade on Sino-US trade statistic.

### 3.2. The effect of processing trade on Si-no-US trade gap statistics

Firstly, Chinese current origin rule has so low requirements for origin criterion formulation, especially lack of unified specific standard for the origin of product assembling that has specific subjective color and randomness when issuing certificate of origin. Therefore, foreign merchant tries every means to acquire the “certificate of China’s origin” by buying China’s primary product or semi-finished product, then export with “made in China” after processed the origin product. While importing country would regard it as “Chinese product” as long as see the label of “made in China”, these products not only seize the special preferential treatment that real Chinese made products enjoyed, but also watered China’s export trade volume. Combined with the above graph, the processing trade of foreign enterprises is higher than domestic enterprises from the beginning to the end that verified China’s processing trade export that was pushed by foreign-owned enterprises. Under the mode of processing trade, China’s effective yield only include lower processing charges, while assumed all negative effects brought by trade surplus result in frequent anti-dumping and special protection on China from other countries, which directly influenced the trade export that real belonged to China. The benefits pattern generated by processing trade was warped in the trade statistics that take origin country as its core, it not only exaggerated the scale of Sino-US trade unbalance, but also cover and vague the relation of benefits distribution under international production arrangement.

Secondly, processing trade not only take high proportion on total trade, the price raising of middleman, but also result in that import declaration price of the US is higher than Chinese export declaration price. Namely, Chinese enterprises import raw material, spare and accessory parts and packing materials from foreign countries, then export them to the US after processed or fitted. Chinese processing enterprises always accept an order by middleman then resell the processed product to the buyer of the US. Therefore, Chinese export declaration price often is the lower price when the middleman bought, while the price to the buyer of the US is often raised by middleman. However, both China and the US don’t have enough information to identify the commodity of direct trade that were bought and reselled by middleman in bilateral trade statistics. So, it is hard to exclude the influence of procession trade on Sino-US bilateral trade statistics in Sino-US trade statistics.

In a word, China’s export trade developed gradually by introducing FDI and developing processing trade under the background of increasingly deepened international intra-production specialization and gradually formed global value chain. So, to speak that processing trade is a



try of seeking new industrialization road under economic globalization, the positive effect on China's economic development should be comprehended under the cover of participating in the international division of labor. However, processing trade should be excluded out of trade statistics and consider import for the export including import content.

**Table 1.** Export Situation of China's improvement trade. Unit: \$100 million.

Years	Export volume of improvement trade	Total export volume	The proportion of improvement trade in total exports (%)
1993	442.48	917.40	48.23
1994	569.80	1210.10	47.09
1995	737.03	1487.80	49.54
1996	843.34	1510.50	55.83
1997	996.02	1827.90	54.49
1998	1044.71	1837.10	56.87
1999	1108.72	1949.30	56.88
2000	1376.52	2492.00	55.24
2001	1474.33	2661.00	55.2
2002	1799.28	3256.00	55.4
2003	2418.51	4382.75	55.3
2004	3279.70	5933.60	55.2
2005	4164.67	7620.00	55.3
2006	5103.55	9690.80	56.9
2007	5175.60	12180.20	50.71

Source: Xiaochao Li. (2008). China Statistical Yearbook, China Statistical Publishing House, P721-723

**Table 2.** the proportion of improvement trade exports of domestic enterprises in China (%)

Years	All domestic enterprises			State-owned enterprise			Private enterprise		
	Improve- ment trade (%)	Among them (ac- counted for %)		Improve- ment trade (%)	Among them (ac- counted for %)		Improve- ment trade (%)	Among them (ac- counted for %)	
		Process- ing with custom- er's ma- terials	Process- ing with imported materials		Process- ing with custom- er's ma- terials	Process- ing with imported materials		Process- ing with custom- er's ma- terials	Process- ing with imported materials
1995	31.06	56.2	43.8	35.88	56.26	43.74	35.88	54.13	45.87
1996	34.88	63.21	36.79	37.81	63.55	36.55	37.81	55.56	44.44
1997	33.21	65.1	34.9	34.14	65.56	34.44	34.14	56.19	43.81
1998	34.33	66.61	33.39	32.49	67.42	32.58	32.49	52.78	47.22
1999	34.18	69.89	30.11	29.54	71.23	28.77	29.54	50.05	49.95
2000	31.15	69.25	30.75	26.14	71.78	28.22	26.14	42.34	57.66
2001	30.74	68.26	31.74	25.17	72.31	27.69	25.17	38.89	61.11
2002	29.13	68.02	31.98	19.66	72.76	27.24	19.66	39.42	60.58
2003	26.05	64.52	35.48	20.17	68.85	31.15	20.17	50.41	49.59
2004	24.19	62.68	37.32	17.31	68.54	31.46	17.31	47.9	52.1
2005	21.98	57.67	42.33	15.42	64.15	35.85	15.42	44.43	55.57
2006	19.55	52.69	47.31	12.99	59.16	40.84	12.99	40.71	59.29
2007	18.41	51.5	48.5	12.24	59.17	40.83	12.24	38.91	61.09
2008	16.14	49.43	50.57	11.18	56.38	43.62	11.18	32.92	67.08

Source: Xiaochao Li. (2008). China Statistical Yearbook, China Statistical Publishing House, P721-723

**Table 3.** the proportion of processing trade exports of foreign-funded enterprises in China (%)

Years	Sino-foreign joint ventures			Wholly foreign-owned enterprise		
	Improvement trade (%)	Processing with customer's materials (%)	Processing with imported materials (%)	Improvement trade (%)	Processing with customer's materials (%)	Processing with imported materials (%)
1995	85.0	8.81	91.19	94.02	4.56	95.44
1996	80.21	10.97	89.03	92.22	6.18	93.82
1997	78.56	12.35	87.65	91.84	7.42	92.58
1998	77.89	12.56	87.44	91.83	9.04	90.96
1999	75.56	14.83	85.17	91.11	12.8	87.2
2000	73.23	13.62	86.38	88.03	12.61	87.39
2001	71.74	12.63	87.37	86.77	12.97	87.03
2002	69.40	10.72	89.28	86.08	12.22	87.78
2003	68.21	41.12	58.88	85.84	12.22	31.15
2004	66.77	7.87	92.13	85.21	12.18	87.83
2005	64.94	7.44	92.56	84.56	14.31	85.69
2006	60.82	7.92	92.08	83.46	13.51	86.49
2007	59.11	7.88	92.12	81.89	13.86	86.14
2008	55.84	7.15	92.85	79.59	10.06	89.34

Source: Xiaochao Li. (2008). China Statistical Yearbook, China Statistical Publishing House, P721-723

## 4. IMPROVEMENT OF FOREIGN TRADE STATISTICS SYSTEM

### 4.1. Analyses on ownership trade statistics system

Based on above analysis, the trade statistics system based on origin cannot reflect the changed international economic relation and exaggerate the degree of global economic unbalance, while ownership trade statistics system can make up the flaw of the trade statistics system that based on origin well. The trade statistical system based on ownership refers to the statistical system that statistically process the foreign economic activities according to “ownership principle” of asset rather than “origin principle”. The current trade statistical system based on origin principle only statistically process the cross-border trade volume, and cannot really reflect the trade benefits of the country, while the trade statistical system based on ownership based on origin statistics and whether the commodity ownership based on cross-border transformation among the citizen, added the statistics of “cross border” rather than “cross citizen” and the business activities of “cross citizen” rather than “cross border”, which directly confirmed the clear relation between FDI and trade, and the trade statistical system of ownership principle can easily overcome the double counting problem of intermediate goods trade of international production network if it excluded the payment of foreign merchant’s investment in the subsidiary corporation of the host country and the input cost of labor force and capital on the host country from sales revenue; for example, “ownership principle” can avoid the double counting of “origin principle” when the intermediate product of final product forming process flowing in transnational corporation during transnational corporations is allocating the factor input in the world. Therefore, it is more scientific and perfect than traditional trade statistical system.

More precisely, compared with origin trade statistics, ownership trade statistical system includes the following characteristics:

Firstly, the counting base of origin trade statistic is “customs area”, which can only measure the opening degree of foreign trade of the country frontier than distinguish the participation degree of

civil citizen and foreign citizen in the foreign trade of the country. While ownership trade based on the counting base that whether can transfer the commodity ownership among citizens of different countries, thus measure the participation degree of the citizen of the country to the foreign trade.

Secondly, the influence of foreign-owned enterprises and international production network on the economy and foreign trade of the country, including total trade volume, trade gap and trade structure, can be judged well by the comparison of origin trade statistics and ownership trade statistics.

Meanwhile, the comparison of the two factors can uncover how much trade unbalance of the country results in the civil citizen and foreign citizen well, thus reduce trade dispute.

However, it should be noted that ownership trade statistical system cannot replace current origin trade statistical system. The trade statistics based on origin principle is based on the customs management of goods and adapts to and is serviced by customs management. Moreover, foreign exchange and currency management are also based on frontier. Customs management has the same management and statistics with foreign exchange. The gap between ownership trade statistics system and customs statistics reflected more information of international trade, so ownership trade statistical system can be the necessary supplement of origin statistics.

#### **4.2. Practices that based on ownership statistical framework of current account of the US**

Because the US realized the defect of current trade statistical system firstly, so it has begun to collect the operation data of overseas subsidiaries since 1950s. National Academy of Sciences (1989) NAS that supplement the defect of current trade statistical system based on the trade statistical framework of ownership, which includes sales revenue of overseas subsidiary of the US; the principle is according to the ownership of asset, thus established clear relation between FDI and trade. NAS divided trade gap of the US into three parts: transnational import and export, foreign net marketing of foreign subsidiary body of the US and net marketing of foreign companies in the US. But it doesn't abandon traditional trade statistical system at the same time, but takes the statistical system based on ownership as supplement account of current account based on traditional trade statistical framework.

BEA has begun compiled current account based on ownership since 1992. BEA (2004) proposed that establish ownership statistical system, the compiled principle called BEA, which refers to decide state party by the right of trading object. This system includes the sales of overseas subsidiaries, which excluded double counting to a large extent; it is more perfect and scientific than traditional system.

#### **4.3. The comparison of trade statistical system based on ownership and cross-border trade statistical system**

Compared with cross-border trade statistical system, the most significant feature of trade statistical system based on ownership provided more information based on ownership, it is the supplement of cross-border trade statistical system.

Firstly, the trade statistics based on ownership divide cross-border trade into intra-trade of cross-border Company and non-affiliated company trade. While cross-border trade doesn't involve whether there is affiliated relation between importer and exporter.

Secondly, compared with origin trade statistical system, the trade statistical system based on ownership added relative details of acquiring investing benefits of cross-border parent company from its overseas subsidiary companies, uncovered the net earnings of foreign directly investment of parent company by the item of “the net earnings of foreign directly investment of the US parent company from the sales of subsidiary companies”.

Thirdly, compared with origin trade statistical system, the trade statistical system based on ownership introduced the concept of trade revenue gap that is the sum of traditional trade balance and net earnings of direct investment of the US. In this regard, the gap of net earnings (export of the US) of US parent company between cross-border import of the US and net expense of the US on foreign subsidiary companies in the US should be added into cross-border export and overseas subsidiary company sales of the US. This gap was listed as “the gap of commodity and service, as well as net sales revenue from subsidiary company” in the remarks. As the cross-border trade, it shows that cross-border company’s sale product and service by subsidiary company is also the important method of participating international business activities.

Fourthly, the appendix of trade statistical system based on ownership provided respective shares of the US and foreign countries among the gross sales output (include inventory change: deduct sales of else subsidiary company which from one parent company) of subsidiary company. For example, the US shares of foreign countries in the US was also subdivided into two parts: the value added of the subsidiary company of the US itself, the value added of other US companies that put into middle elements; while cross-border trade statistical system has not provided this information.

#### 4.4. Counting method analysis based on ownership trade statistical system of the US from 2005 to 2007

The statement that was called as “An Ownership-based Frame Work of the US Current Account” analyzed different margin of current accounts, variation of commodity and service trade, as well as cross-border trade and revenue, trade of subsidiary company and non-affiliated company and the constitution of sales and output of subsidiary company.

**Table 4.** the Difference of Four International Business Activities in the United States  
Based on the Principle of Ownership Statistics. Unit: \$100 million.

	2005	2006	2007
1 Export earnings of goods and service	18167	21339	24621
2 Exports of Goods and Services, Net Income from Sales of Overseas Affiliates in the United States	15760	17765	20064
3 Exports of goods and services	12815	14517	16432
8 Net outward FDI income from US parent companies sold by affiliates	2945	3248	3632
17 Other income	2407	3574	4557
21 Imports and expenditures of goods and services	24596	28462	30727
22 Net US expenditure on imports of goods and services and purchases from foreign affiliates in the United States	21181	23628	24711
23 Imports of goods and services	19967	22120	23446
28 Net expenditure purchased from affiliates in the United States and net income from direct investment by foreign parent companies	1213	1508	1265
37 Other income	3416	4834	6016
41 Net one-way transfer	-1058	-913	-11609

Source: Jeffery H. Lowe. (2012). An Ownership-based Frame Work of the US Current Account 1999-2008.

According to the above table, ownership trade statistical system is as same as cross-border trade statistical system in the highest classify, which was divided into three categories: export earnings of commodity and service, import of commodity and service, as well as net unilateral transfer. The difference with cross-border trade statistical system is in the second category. Export of commodity and service was divided into three categories: export of commodity and service, net sales revenue of overseas subsidiary company of the US, as well as other earnings. Cross-border trade was subdivided into subsidiary company trade and not-affiliated company trade among them, while subsidiary company trade was further divided into the trade between parent company and its overseas subsidiary institutions of the US, as well as the trade of foreign subsidiary companies in the US and the foreign parent company. Net sales revenue of overseas subsidiary companies of the US was counted by non-bank subsidiary company and bank subsidiary company respectively.

According to the specific data, the first type is traditional gap of the balance of international payments. It is equal to the first line (export and revenue of commodity and service) minus the 21<sup>st</sup> line (import and expense of commodity and service) plus the 41<sup>th</sup> line (net unilateral transfer). According to the data of Table, the margin of the current account of the US in 2005 is -748.7 billion dollars and -8036 billion dollars in 2006.

The second type is trade gap of commodity and service; it is equal to the third line (export of commodity and service) minus the 23<sup>rd</sup> line (import of commodity and service) of the graph. According to the data of Table, the trade gap of commodity and service of the US in 2007 is -7001.4 billion dollars.

The third type is a new gap come up from the statistical principle based on ownership, which was called as “the gap of commodity and service, as well as net sales revenue from subsidiary company”, its computational formula is that the second line (commodity and service export, as well as net sales revenue from overseas subsidiary company of the US) minus the 22<sup>nd</sup> line (commodity and service import, as well as the US net expense purchased subsidiary company in the US) of Table 4. According to Table 4, this gap of the US in 2007 is -464.7 billion dollars.

The forth type gap is also a new gap come up from statistical principle based on ownership, that is “the gap of foreign net investment revenue and net expense”, its computational formula is that the 8<sup>th</sup> line (foreign directly net investment revenue of the US parent company from subsidiary company sales) minus the 28<sup>th</sup> line (net expense of subsidiary company in the US) of Table 4. According to Table 4, this gap of the US in 2007 is 236.7 billion dollars. The current trade statistical system cannot reflect the fourth gap, while it reflected the benefits of the US acquired by participating international business activities, which has practical significance. The trade statistical system based on origin rule cannot reflect the profit of transnational corporation acquired by subsidiary institutions sales correctly, so it doesn't really reflect the practical gains relation when a country participating international business activity. Under the trade statistical system based on ownership, the 8<sup>th</sup> line (foreign directly net investment revenue of the US parent company from subsidiary company sales) of the graph records the net revenue of overseas subsidiary institutions of the US transnational parent company acquired from foreign business activity, that is sales revenue of overseas subsidiary institution minus the commodity and service of the subsidiary institution directly purchased from the US, minus the cost and profits (such as reward payment of subsidiary employees) that should be recorded in other countries, then minus sales revenue of others subsidiary institutions of the same US parent company.



According to Table 4, the net revenue of overseas subsidiary institutions of the US in 2007 is 363.2 billion dollars. Meanwhile, the 28<sup>th</sup> line (net expense of subsidiary company in the US) of Table 4 records the net investment revenue of the subsidiary institutions of foreign parent company in the US acquired by business activities in the US. It is equal to the sales revenue of subsidiary institutions of foreign parent company in the US minus the commodity and service of subsidiary company in the US directly purchased in overseas, then minus the cost and profits that should be recorded in the US (such as the rewards of the subsidiary employees in the US), then minus the sales revenue of other subsidiary companies in the US that come from the same parent company. According to Table 4, the net expense of the US in the subsidiary company in the US in 2007 is 126.5 billion dollars. The gap of the two items constituted “the gap of foreign net investment revenue and net expense”.

Following results can be concluded by Table 4:

Firstly, transnational company distribute service and commodity by setting overseas subsidiary company; this form replaced traditional transnational trade, and the sales of these subsidiary institutions are even greater than transnational export scale. Import and export trade in transnational company occupied about 1/3 of the foreign trade of the US. In 2003, the commodity export scale of the US is 723.8 billion dollars, while the sales of foreign subsidiary institutions reach up to 3383 billion dollars unexpectedly, almost 5 times of its export scale. Therefore, the main form of the US participate international business activity is the foreign subsidiary institution that formed by foreign directly investment, while participate international business by export and import is just a small part of foreign economic activity, and the US acquired huge benefits by the business activity of foreign subsidiary institution, while these benefits cannot be counted under the current income and expenditure statistical system. The foreign subsidiary institutions of the US acquired about 230 billion dollars in 2004, while the trade deficit the US counted is 535.7 billion dollars, which is nearly 1/2 of the trade gap. The net benefits of the US are 129.3 billion dollars when excluded 100.5 billion dollars benefits those companies of other countries acquired by the subsidiary institutions in the US. While these 129.3 billion dollars reflected the actual gains of the US that participate in international business activity, however, the current trade statistical system exaggerated the trade deficit of the US because of omitting the huge gains of the US.

Secondly, the reason that foreign net directly investment revenue brings in trade balance is similar to transnational trade that transnational companies sell commodity and service to international market by subsidiary company. Including the US trade deficit of foreign net directly investment revenue will shrink 20% at least.

## 5. CONCLUSION AND POLICY RECOMMENDATIONS

Processing trade takes a large part in Sino-US trade, more than 55% export of China to the US belong to processing trade at present, the raw materials, parts and package it needed are imported from Japan, Korea and Singapore, as well as Hong Kong and Taiwan, so China can only obtain few processing charges in processing trade. However, the whole value of the commodity was counted as imported from China in the US statistics, thus exaggerated trade deficit to China.

In addition, price rising of middleman also result in that the value of the US import declaration is higher than China's export declaration. However, both China and the US have not enough



information to eliminate the influence of processing trade on Sino-US trade in trade statistics, because firstly, processing trade and carrying trade are crossed; secondly, the directly traded commodity that purchased and carried by middleman cannot be recognized; thirdly, it is hard to calculate the value-added part of China, that is the value-added proportion of labor intensive product and technology intensive product which are different. Therefore, it is hard to exclude the influence of processing trade on Sino-US bilateral trade statistics in Sino-US trade statistics.

China and the US need to negotiate and coordinate center on bilateral trade statistics. Under the precondition that both parts are reluctant to adjust current customs statistical system and rules, China and the US could establish a work team that adjust impartially statistical error caused by different customs statistical rules to let both parts reach a consensus on the severity awareness of Sino-US trade unbalance, thus the discussion can really center on substantial issues behind trade unbalance. Meanwhile, China should refer to the methods of Japan, Canada and Korea at the right moment to put forward bilateral trade coordination system to the US that coordinate the trade statistical number that specially coordinate the two countries.

In order to reflect the gains of China when joining international business activity more reasonably and scientifically and change the harmful situation of current trade statistical system brings to China, the trade statistical system based on ownership was established as supplement; the followings are suggestions:

Firstly, China should set up micro database that reflect business operation of foreign investing enterprises; they not only include the business activities of foreign enterprises in China, but also include Chinese “going out” foreign directly investment enterprises. At present, the data related to foreign-funded enterprises in China’s Ministry of Commerce are relatively macroscopic, such as the countries that foreign capital investment flowed, but it not includes the micro situation data about foreign-funded enterprises that do business activities in China. However, the relative database must be established to set up a trade statistical system based on ownership, and constantly enrich and complete it.

Secondly, on the one hand, China need to set up and enrich the micro data of foreign-funded business activities; on the other hand, China should not give up “cross-border” trade accounting system based on origin rule for cross-border trade statistical system that is still the sole criterion when governments measure trade gains relations.

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# ETHICS MANAGEMENT AT THE EUROPEAN COMMISSION

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**Abstract:** *This article reports on ethic management at the European Commission services and analyses its implementation measures. The European Commission is one of the most powerful international executives in the world and it is a very particular bureaucracy employing approximately 33.000 officials from twenty-eight Member States. The European Commission fulfils a very complex mandate by implementing EU policies and the budget as well as enforcing EU legislation. This challenging task is carried out in a unique structure, which combines professional bureaucratic processes with cultural richness. As of the year 2000 – driven by external pressure – European Commission enhanced its Ethic and Compliance policy by issuing guidelines and implementation measures at its headquarters; subsequently these efforts were also transported to the agencies, most of them being established in the Member States.*

*The article will analyse recognized Ethics management tools applied at the European Commission services with a special view to the efficiency of the role of an Ethics officer.*

*The article provides a concise overview on how Ethics policy is implemented in a highly complex and international structure. The reader will learn about organisational aspects of the European Commission and applied management techniques in terms of Ethical reforms.*

*The method is a sound literature research combined with a practical analysis of the current state of Ethics management in European bodies.*

**Keywords:** *Ethics program; European Commission; Ethics officer; Intercultural challenges.*

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## 1. INTRODUCTION

The European Commission is a very particular bureaucracy employing approximately 33.000 staff (permanent and temporary contracts) from twenty-eight Member States. The European Commission fulfils a very complex mandate by implementing EU policies and the budget as well as enforcing EU legislation. This challenging task is carried out in an exclusive structure, which combines professional bureaucratic processes with cultural richness.

The view from the Commission (its official line) is that the EU civil service is unique in the world of international organisations. Cosmopolitan, multinational and multilingual, it has succeeded in creating a hybrid culture without parallel in the history of public administration: an organisational culture that harmoniously blends together the different administrative traditions of its member states to form a ‘European’ model of civil service with its own distinctive identity and ethos. A ‘cultural melting pot’ that supposedly combines all that is best from the different national civil services, the Commission is also portrayed as small, dynamic and efficient: a ‘lean machine’ in the words of its former Secretary General (Shore 2001).

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As of the year 2000 – driven by external pressure – European Commission enhanced its Ethic and Compliance policy by issuing guidelines and implementation measures at its headquarters; subsequently these efforts were also transported to the agencies, most of them being established in the Member States working merely with staff under temporary assignments.

## **2. ETHICAL REFORMS AT THE EUROPEAN COMMISSION – BACKGROUND, DEVELOPMENT**

Following publication of a report on March 15 1999 of the Committee of Independent Experts (CIE), (MacMullen 1999) “plainCitation”: “(MacMullen 1999 investigating allegations of “Fraud, Mismanagement and Nepotism in the European Commission” the entire College of Commissioners resigned, plunging the Commission into the most serious political crisis in its 42-year history (Shore 2001). The commission official David Spence, considered in 1994 the system of personal networks that important that they constitute a ‘parallel system of administration’ with its own rules, codes and career paths. The characteristics of this ‘informal system’ include:

- highly politicised senior management with close links to parties in power;
- an institutionalised system of national quotas (with particular posts being reserved for particular nationalities);
- a powerful Cabinet system, whose members act as bastions of national self-interest, and who constantly interfere in staffing matters (Ross, Jenson 1995);
- a host of informal methods used to circumvent the formal procedures, including the parachuting of political appointees into senior administrative positions (Ross, Jenson 1995).

Based on these findings the European Commission took action and developed a complex system of ethical measures laid down in policy papers and implementing rules in a first step at the EU headquarters in Brussels.

Gradually the European Commission took interventions which, over time, have engendered a rather comprehensive ethics infrastructure. The fall of the Santer Commission being one of the most damaging public scandal the Commission has ever known a White Paper on Reforming the Commission had been published (Union 2000, p. 200). At the beginning of this document the key principles of “good governance” are laid down. They are defined as “independence, responsibility, accountability, efficiency and transparency”. These terms build the main principles for the ethics policy at commission services being put in practice in the following years in the eras of Neil Kinnock (1999 – 2004) and Siim Kallas (2004 – 2009) (Nastase 2016).

In March 2013 the Vice-President of the European Commission, Maroš Šefčovič is meeting with the Commission’s internal ethics correspondents and the Ombudsman. In a speech he concludes: “In the European Union citizens have high expectations of their public administration at international level (Šefčovič 2013). European public servants are expected to serve the public interest with impartiality, loyalty and integrity. Following these core values Commission services established written codes that define standards for ethical behaviour” and he continues that citizens expect EU public servants to serve the public interest with impartiality, loyalty and integrity and to do so in all aspects of their daily work. Professional behaviour of EU civil servants is essential to build trust and the objective of the EU is to gain and to maintain credibility by guaranteeing that staff in Commission services carry out their duty in an impartial and accountable manner.

### 3. PUBLIC ETHICS AT THE EUROPEAN COMMISSION – STATE OF PLAY

The Human Resource units in European institutions introduced various measures in order to implement the Ethics & Integrity policy. They became an important part of the Human Resource Management. EU policy is built on trust and the European Commission undertook many efforts since 2013 to implement useful tools for an efficient Ethics Management deriving from the private economy. Still there is room for development especially with a view to the vast number of temporary assignments, mostly working at the European agencies.

The EU Agencies are performing tasks across a wide range of policy areas, with significant resources devoted to them. To date, there are more than 46 structures (32 decentralised Agencies, 7 Joint Undertakings and 6 Executive Agencies). In total, they employ more than 8,000 members of staff, mainly under temporary contracts (European Union 2019).

By now in most institutions the Human Resource units organise ethics trainings for all staff and it became common practice to introduce mandatory training also to newcomers. At the management level a stricter model is applied: managers recruited from outside the Commission are expected to sign a statement that they are aware of their ethical obligations (Nastase 2016).

Whereas the central European Commission services mostly work with civil servants, the agencies – most of them are established in the member states – contract a high percentage of staff on temporary assignments. An EU agency has its own legal personality. EU agencies were created in order to accomplish specific tasks for example in the field of scientific or technical know-how, or to bring together different interest groups facilitating a dialogue at European and international level. Also, the European Agencies provide trainings to its staff however the role of an Ethics officer or an Ethic correspondent is not established in a homogenic way.

### 4. ETHICS PROGRAM; ETHICS MANAGEMENT, ETHICS OFFICER

Following a study of Kaptein (2015) not only whether to adopt an ethics program, but also which components to adopt when. This study shows that unethical behavior occurs less frequently in organizations that have an ethics program than in organizations that do not have an ethics program. Nine components of ethics programs were identified and examined. The results show that there is a direct relationship between the number of components adopted and the frequency of observed unethical behavior. No relationship was found between pre-employment screening and unethical behavior, while the strongest relationship was discerned between accountability policies and unethical behavior. The study further reveals that the best sequence for adopting components of an ethics program is (1) unethical behaviour occurs less frequently in organizations that have an ethics program than in organizations that do not have an ethics program. The study examined nine components of ethics programs and the results show that there is a direct relationship between the number of components adopted and the frequency of observed unethical behaviour. The study reveals that the best sequence for adopting components of an ethics program is (1) a code of ethics, (2) ethics training and communication, (3) accountability policies, (4) monitoring and auditing, and (5) investigation and correction policies – all of which are directly related to less unethical behaviour – followed by (6) an ethics office ( r ), (7) ethics report line, and (8) incentive policies of which are indirectly related to less unethical behaviour.

These components are partially established in the Directorates General, for instance DG COMP (Directorate General for Competition) provides a well-structured internal website tackling some of the topics recommended by the literature.

One of these components is the role of the Ethics officer, in the Commission introduced as Ethics correspondents. The central Human Resource General Directorate in Brussels (DG HR) has developed a special website and a role of Ethics correspondents has been established in 2013 (Šefčovič). There are tools in place for monitoring ethical questions and factual issues such as a possible critical involvement of family members.

In the literature (mostly referring to the private sector) Chief Ethics and Compliance Officers (ECOs) are high-level individuals who are primarily responsible for creating and maintaining organizational environments that aim to produce ethical and law – abiding employees and leaders. They do so by developing and distributing codes of conduct, designing and delivering training programs, developing and managing reporting lines and investigation systems, contributing to the design of performance management systems, and working to create ethical cultures and climate (Treviño, den Nieuwenboer, Kreiner, Bishop 2014).

In its guidelines the Commission recommends to its staff in case of questions or problems in the domain of ethics (*Codes of conduct* 2019). First of all, contact the local ethics correspondent. Each DG has appointed these staff experts to serve as the focal and first contact point for all ethics related issues, both for the services and their staff. When dealing with queries from staff the ethics correspondents act in confidence”.

DG COMP integrated the role of their Ethics and Compliance Officer (ECO) in a special team called Resources, Ethics and Security being in charge of developing and implementing a thorough and efficient policy on ethics and security. The ECO monitors the consistent implementation of ethical rules and should be contacted for all practical questions regarding individual cases like external activities or conflicts of interest.

At the central level, unit DG HR - Ethics, Rights and Obligations is responsible for the general policy on ethics for staff members and serves as a reference point for the ethics correspondents.

For any questions regarding Commissioners and the overall broader coordination in respect of Public Service deontology, Public Service Ethics is the contact point.

When it comes to disciplinary questions the Commission asks the staff to direct these issues to IDOC and OLAF are the responsible services. (Investigation and Disciplinary Office and The European Anti-Fraud Office)

## **5. STANDARDS AT EUROPEAN COMMISSION SERVICES WITH REGARD TO ETHICS & INTEGRITY**

Ethical rules for European civil servants as well as for the vast number of employees on temporary basis are defined as practical rules and guidelines – a so-called Code of Conduct on Ethics & Integrity for each institution of the European Commission services and the agencies (Ethics and the European Commission, 2013)



Following (Kaptein 2015) not only whether to adopt an ethics program, but also which components to adopt when. This study shows that unethical behavior occurs less frequently in organizations that have an ethics program than in organizations that do not have an ethics program. Nine components of ethics programs were identified and examined. The results show that there is a direct relationship between the number of components adopted and the frequency of observed unethical behavior. No relationship was found between pre-employment screening and unethical behavior, while the strongest relationship was discerned between accountability policies and unethical behavior. The study further reveals that the best sequence for adopting components of an ethics program is (1 a code of ethics can be defined as “a distinct and formal document containing a set of prescriptions developed by and for a company to guide present and future behaviour on multiple issues of at least its managers and employees toward one another, the company, external stakeholder and/or society in general”).

The Staff Regulations (and the CEOS - Conditions of Employment of Other Servants of the European Union) lay down the basic principles governing relations between the EU institutions and their staff (*Regulation (EU, Euratom) No 1023/2013 of the European Parliament and of the Council of 22 October 2013 amending the Staff Regulations of Officials of the European Union and the Conditions of Employment of Other Servants of the European Union 2013*). Of particular importance with regard to staff ethics and conduct is Title II of the Staff Regulations (see Annex 1 for full text), which deals with rights and obligations of officials and to which reference is frequently made in this Guide. The Staff Regulations are complemented by decisions and guidance in specific domains, as well as by the Financial Regulation.

## 6. ETHICAL PRINCIPLES OF THE EUROPEAN COMMISSION

Only by aspiring to the highest standards of integrity can you ensure the Commission's credibility. In fact, ethics is integrity in action. When we have integrity, we act ethically, which means adhering consistently to ethical standards and making sound decisions based on these standards. For the Commission to fulfil its mission of serving the common good and the public interest, your conduct and decision-making has to be irreproachable and guided by the following principles:

- Independence,
- Impartiality,
- Objectivity,
- Loyalty.

## 7. CONCLUSION

After a period of scandals and irregularities in the 90<sup>th</sup> the European Commission reacted by implementing an Ethics and Compliance policy. It is to be noted that this process has been driven by external pressure. This circumstance following the literature requires well defined and measurable rules are written down in a code of conduct. Such a code of conduct clearly states what employees should do to act in a responsible way. It also makes clear what external parties can expect from the company. In order to guarantee these expectations, compliance to the organisational rules needs to be enforced. Measurement and assessment systems in an organisation constitute a control system to ensure compliance (Nijhof, Fisscher, Looise 2000).

A Code of Conduct is to date well established in all European Commission institutions, there are trainings in place as implementation tool and Ethics correspondents can be found mostly in



the DGs. With the role of Ethics correspondents, the Commission decided to adopt an important component of Ethics management. Regarding disciplinary measures or cases of fraud the Commission asks its staff to direct these issues to the Fraud office or the Ombudsman. This can be seen as critical that for different questions or problems different teams have to be contacted.

As regards the other components for an effective ethics policy recommended by the literature it needs to be further analysed if the approach of the Commission is harmonized in its DGs and other institutions. A synergetic implementation of these components could show more effectiveness of an ethics program.

Remišová, Lašáková, Kirchmayer conclude that the number of elements as well as their combination may vary from organization to organization. The selection of specific Ethics Program components depends on the specific needs of the organization and on the economic, cultural, social, or political circumstances in which a particular organization is located (Remišová, Lašáková, Kirchmayer 2018). All those factors have high impact on the European Commission especially the cultural and social circumstances since the European Commission is a massive structure which can be compared with a conglomerate of many ministries in an intercultural environment. Given the fact that employees come from 28 member states implementing a harmonized Code of Conduct is a very challenging task. The role of the ECO can be considered as one of the most important components of the EU ethics policy, however further assessment would be required in order to see how and if different cultural perceptions are and should be addressed.

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# RELATIONSHIPS OF FOREIGN EXCHANGE RATES WITH MACROECONOMIC VARIABLES, ECONOMIC CRISIS, AND TRADE VOLUMES: AN EMPIRICAL STUDY FROM INDIA

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**Abstract:** *Volatility in foreign exchange rates is an indicator of economic performance particularly for emerging market economies like India. This study tries to re-examine the relationship between exchange rates and macroeconomic variables for Indian economy. It addresses three issues, namely Volatility in exchange rates (USD/INR; EUR/INR and GBP/INR); Effect of Economic crisis represented by global financial crisis (GFC) and macroeconomic variables mainly Inflation and Yield of 10years Govt. Securities on above mentioned three exchange rates; and Relationship between exchange rates volatility and foreign trade (both export and import). Daily data for three exchange rates are taken for the period of January 3<sup>rd</sup>, 2000 to March 26<sup>th</sup> 2019, whereas for other two objectives, monthly average exchange rates are used along with monthly data for select macroeconomic variables for the period of Jan 2000 to Dec 2018. Volatility is represented by Standard Deviation and Causality is checked through Granger Causality Test. The findings suggest that volatility is highest for EUR/ INR followed by GBP/INR and USD/INR. The average annual volatility for all three exchange rates indicates the minimum value in 2001 whereas maximum value for 2013. It is also observed that volatility is higher during crisis period compared to pre and post crisis periods for all three exchange rates. Granger Causality test suggests that out of 10 pairs of testing for causality only unidirectional cause effect relationships stating GBP granger causes yield on 10 years Government securities. The study further finds that USD/ INR exchange rate granger cause imports of India. These findings will help the market players at the time of taking their strategic decisions whereas to regulators during their policy decision process. For academicians and researchers, it provides an opportunity to explore the conditions with more macroeconomic variables and with the use of advanced econometric tools.*

**Keywords:** *Exchange rates, Global Financial crisis, Volatility, Granger Causality tests*

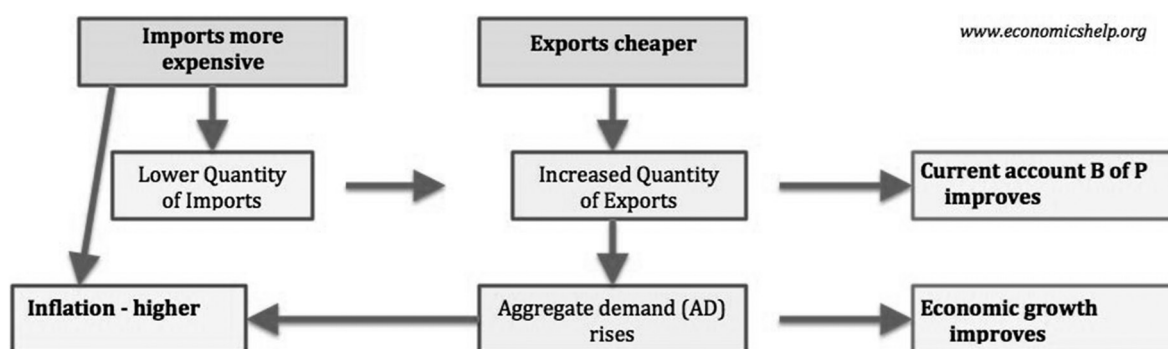
## 1. INTRODUCTION

Understanding the relationship between the currency markets and macroeconomic variables is an essential component of international trade and investments as it involves exposure in foreign currencies. This relationship has received a considerable amount of attention from: economists, international investors and policymakers. Since the Opening of currency market in 1973, the linkage of exchange rate and macroeconomic variables became one of the important areas of study. Increasing integration of global financial markets (see Bekaert, Harvey, and Lumsdaine (1998); Otmar Issing (2000); Schumacher (2018)) has gradually increased the relevance of currency exchange rate fluctuation and it is expected to present some clear pattern of cause effect relationships both in short and long run with macroeconomic variables and economic happenings like financial crisis. Volatility in foreign exchange rates is an indicator of economic performance and its strength specially for emerging market economies like India. Higher volatility is perceived as higher risk in that economy (see Ilhan (2006)).

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Theoretically, in the long-term, a strong (appreciating) exchange rate tends to occur in countries with low inflation, improving competitiveness and a strong economic performance. A strong exchange rate is often considered to be a sign of economic strength. It may be perceived as a symbol of economic success and national pride. However, a contrary opinion is that a strong exchange rate can depress economic growth because exports become more expensive, leading to less demand for exports and more demand for imported goods as Imports become cheaper. Gradually it reduces aggregate demand (AD) for the domestically produced goods and push economy to downturn.

Economy trapped in downturn, evidenced by the rising Current account deficit (of Balance of Payments), may go for correction through policy interventions, especially devaluating the domestic currency. This will improve the current account position and will stimulate the economic growth as indicated in flow chart given below in figure 1.



**Figure 1.** Flow chart showing effect of Devaluation on Current account of Balance of Payments and Economic Growth. (Source: economicshelp.org)

The study is organized as follows: Section two is review of literature whereas in section three we provide data and their sources. Methodology and estimation procedures are described in section four. In section five we provide empirical results while summary and policy suggestion are provided in the last section.

## 2. REVIEW OF LITERATURE

Review of previous studies indicates that the effort to find the relationships between Exchange rate volatility and different macroeconomic variables have been increasing in last one decade for emerging economies. Selim and Murat (2012) study the relationship between monthly Currency sale rates and Export series for Turkey at the turning points detected by Unit root test with one and two structural breaks. The findings reveal that exports are not influenced by structural turnings in the sale of currencies i.e. the export is not sensitive to the structural breaks and changes in currency rates. Su (2012) tries to find the long run equilibrium relationship between Renminbi (RMB) exchange rate and macroeconomic variables in China by using non-parametric rank tests (as proposed by Breitung) and the threshold error-correction model (TECM) to detect the nonlinear causal relationships. His findings support the nonlinear relationship with each other and asymmetrical error-correction process in China. Affandi and Mochtar (2013) in their study of current account and real exchange rate dynamics for Indonesian market observed the changing behavior of real exchange rate before and after year 2000. It is noticed that shift from temporary (before the year 2000) to permanent (after the year 2000) shocks is the cause of movement in real exchange rate. However, this behavioral shift doesn't affect the current

account dynamics i.e. variance in current account after 2000 is also mainly due to temporary shocks. Dimitrios and Nicholas (2013) examine the effect of exchange rate volatility on sectoral exports for Croatia and Cyprus. Their findings suggest that exchange rate volatility has no effect on the level of exports for both the countries when measured through standard deviation of the log effective exchange but when measured through an alternative method then there is an indication of a stronger effect from movements of the exchange rate to the level of exports showing a negative statistical significant relationship for Croatia. Zubair et. al. (2014) in their study try to find the cause effect relationships between Exchange Rate, Imports, Exports, Foreign Reserves as independent variables and GDP of Pakistan as dependent variable. Their findings suggest that one basis point change in exchange rate can result in thousands of USD change in GDP. They further observed that depreciation of exchange rate has a positive impact on the exports, but sudden and abrupt fluctuation in exchange rates can disturb economic growth. Ramasamy and Abar (2015) in their study to find the influence of macroeconomic variables on three different exchange rates viz. AUD/USD, Euro/USD, AUD/Euro representing three countries USA, Australia and Germany. They selected nine macroeconomic variables namely interest rates, inflation rate, balance of payments, employment rate, corruption index, gross domestic product, deficit/surplus rate, tax rate and borrowing rate all relative values. They applied multi-model regression by linking complementary variables to identify the best model. Their findings suggest that all macroeconomic variables significantly influenced the exchange rates except employment and budget deficit. Salman et.al. (2015) find the long run relationship between the exchange rate and macroeconomic variables (GDP, inflation, interest rate and current account). They also find that exchange rate granger causes GDP and not the vice-versa for Pakistani economy. Sonaglio, Campos, and Braga (2016) attempt to examine the impact of changes in the monetary and exchange rate policies along with the composition of the total exports on the performance of the Brazilian economy. They use a structuralist model to evaluate the same. The findings reinforce the relevance of the manufacturing sector to economic growth, especially in a competitive exchange rate environment. Venkatesan and Ponnammam (2017) analyze the macroeconomic factors affecting Foreign Exchange in India by using ARDL model. It is found that FDI has a long-term relationship with the Indian rupee movements whereas in the short run this relationship is not straight forward, as it depends on specific characters of the economy. They also observed that Inflation had a negative impact on foreign exchange rate.

These studies are focused on some specific relationships or some specific geopolitical / economic zones or blocks. Their findings are also contrasting in nature. Some studies have concentrated on the relationships between the two variables with limited perspectives like effect of currency volatility on GDP of the economy. Further, very limited work is available for Indian economy. Thus, it has become necessary to study the relationship between Exchange Rates and macroeconomic variables along with trade volumes. These relationships should be studied to get a more comprehensive view about the information transmission processes. The present study is a step in this direction. Prime motivation of the proposed study is to re-examine the relationship between exchange rates and macroeconomic variables for Indian economy. The main objective of this study is to address three issues, namely: 1. Volatility in exchange rates (USD/INR; EUR/INR and GBP/INR), 2. Effect of Economic crisis represented by global financial crisis (GFC) and macroeconomic variables mainly Inflation and Yield of 10years Govt. Securities on above mentioned three exchange rates, 3. Relationship between exchange rates volatility and foreign trade (both export and import).



### 3. DATA

To study the volatility, daily data for three exchange rates are taken for the period of January 3<sup>rd</sup>, 2000 to March 26<sup>th</sup> 2019, resulting to 5090 observations for each exchange rate whereas for other two objectives, monthly average exchange rates are used along with monthly data for the period of Jan 2000 to Dec 2018 for select macroeconomic variables totaling 228 observations. These variables are Inflation and Yield of 10years Govt. Securities. Monthly data for Imports and Exports are also taken for the same period. Data are collected from Reserve Bank of India ([www.rbi.org.in](http://www.rbi.org.in)).

### 4. METHODOLOGY

In this section, the methodologies employed for finding the relationships between forex rates and macroeconomic values are discussed. The volatility is also measured for all three exchange rates series through standard deviations on annual basis. This will indicate the nature and volatility trend for the select exchange rates. First of all, the stationarity test is done for these series by using Augmented Dickey-Fuller test (ADF). A time series  $Y_t$  ( $t=1,2,\dots$ ) is said to be stationary (in the weak sense) if its statistical properties do not vary with time (expectation, variance, autocorrelation). Identifying that a series is not stationary allows to afterwards study where the non-stationarity comes from. Unit root tests, such as the Dickey-Fuller test and its augmented version, the augmented Dickey-Fuller test (ADF), or the Phillips-Perron test (PP) may be applied to do the testing of stationarity. We applied ADF test to all the series i.e. Forex rates, Inflation, yield of 10years Govt. Securities; for all sample countries it is tested individually.

The second step is to determine the Lag length for Granger causality tests. Lag length is determined by using Vector Auto regression (VAR) Lag length selection criteria. The lag length which has the minimum value for Schwarz information criterion is used for causality test. We may use the **Granger causality test** in our study which is a statistical hypothesis test for determining whether one time series is useful in forecasting another.

A time series  $X$  is said to Granger-cause  $Y$  if it can be shown, usually through a series of t-tests and F-tests on lagged values of  $X$  (and with lagged values of  $Y$  also included); those  $X$  values provide statistically significant information about future values of  $Y$ .

### 5. EMPIRICAL FINDINGS

All three exchange rates along with select macroeconomic variables are stationary at 1<sup>st</sup> difference and their average volatility (measured through standard deviation) for the entire sample range is overall on higher side for all three with highest value for EUR/ INR (11.73) followed by GBP/INR (9.80) and USD/INR (9.38). The average annual volatility for all three exchange rates indicates the minimum value in 2001 (EUR/INR: 1.23; GBP/INR: 1.37) and in 2002 for USD/INR: 0.285 whereas maximum value for 2013 (EUR/INR: 6.13; GBP/INR: 7.65; USD/INR: 3.90) (see Table1Panel A). As per Goldman Sachs this may be because of high inflation, high current account deficit, lower growth rate and FII outflow at domestic front and US Federal Reserve's decision to taper stimulus at external front. To find the impact of GFC on the exchange rate volatility, the whole sample gets divided into three periods namely pre-crisis (Jan 2000 to Aug 2007), crisis period (Sept 2007 to Jan 2009) and post crisis period (Feb 2009 to March 2019). It is interesting to observe that volatility is higher during crisis period compared

to pre and post crisis periods for all three exchange rates (see Table 1 Panel B) agreeing with the previous findings (Kohler 2010). However, Post crisis period exhibits higher volatility compared to pre-crisis proving the continued but diminished effect of GFC on the exchange rates.

Granger Causality test suggests that out of 10 pairs of testing for causality only unidirectional cause effect relationships stating GBP granger causes yield on 10 years Government securities with the lag value 2 is significant at 5%. Inflation has no causal relationships with any exchange rate or with 10-year G-Sec yield (see Table 2).

Theoretical understanding says that devaluation/depreciation of domestic currency makes import costly and unattractive whereas export attractive. However, this study doesn't find any such relationships between exchange rates and export/import of the country except in one case where USD/INR exchange rate granger cause imports of India (F statistics 5.03; p value: 0.0073) (See Table 3). The findings support the view of (Cristian and John 2011).

## 6. SUMMARY AND CONCLUSION

Volatility in foreign exchange rates is an indicator of economic performance for emerging market economies like India. Higher volatility is perceived as higher risk in that economy. This study tries to address three issues namely 1. Volatility in exchange rates (USD/INR; EUR/INR and GBP/INR) 2. Effect of Economic crisis represented by global financial crisis (GFC) and macroeconomic variables mainly Inflation and Yield of 10 years Govt. Securities on above mentioned three exchange rates, 3. Relationship between exchange rates volatility and foreign trade (both export and import). To study the volatility, daily data for three exchange rates are taken for the period of January 3<sup>rd</sup>, 2000 to March 26<sup>th</sup> 2019, whereas for other two objectives, monthly average exchange rates are used along with monthly data for the period of Jan 2000 to Dec 2018 for trade volume (import and export), inflation and yield on 10 year government securities. All three exchange rates along with select macroeconomic variables are stationary at 1<sup>st</sup> difference and their average volatility (measured through standard deviation); for the entire sample range is overall on higher side for all three with highest value for EUR/ INR (11.73) followed by GBP/ INR (9.80) and USD/INR (9.38). To find the impact of GFC on the exchange rate volatility, the whole sample gets divided into three periods namely pre-crisis (Jan 2000 to Aug 2007), crisis period (Sept 2007 to Jan 2009) and post crisis period (Feb 2009 to March 2019). It is interesting to observe that volatility was higher during crisis period compared to pre and post crisis periods for all three exchange rates. However, Post crisis period exhibits higher volatility compared to pre-crisis proving the continued but diminished effect of GFC on the exchange rates. It is also observed that out of 10 pairs of testing for causality only unidirectional cause-effect relationships stating GBP granger causes yield on 10 years Government securities with the lag value 2, is confirmed. Inflation has no causal relationships with any exchange rate or with 10-year G-Sec yield.

A convention that devaluation/depreciation of domestic currency makes import costly and unattractive whereas export attractive is not confirmed by this study except in one case where USD/ INR granger cause imports of India (F statistics 5.03; p val: 0.0073).

These findings will help the market players during their strategic decision makings whereas to regulators during their policy decision makings. For academicians and researchers, it provides an opportunity to explore the conditions with more macroeconomic variables and with the use of advanced econometric tools.

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**Table 1.** Exchange Rate Volatility

**Panel A.** Average Annual Volatility (SD)

Year	USD/INR	EUR/INR	GBP/INR	Year	USD/INR	EUR/INR	GBP/INR
2000	1.24147	1.463444	1.630487	2010	0.89625	3.012878	2.139643
2001	0.55801	1.239639	1.370962	2011	2.69548	2.581804	3.313567
2002	0.28504	2.477491	2.820777	2012	2.26502	2.073637	3.719252
2003	0.90786	1.752078	1.987124	2013	3.90199	6.124834	7.645069
2004	0.79596	1.791515	1.80478	2014	1.09996	2.870811	2.000302
2005	0.8001	1.775084	2.166262	2015	1.62741	2.286129	3.125808
2006	0.83033	2.332941	3.928679	2016	0.60879	1.377813	5.647086
2007	1.79436	1.272124	2.409821	2017	1.23007	2.631906	1.823527
2008	3.49055	3.075606	3.921078	2018	3.1504	2.052947	2.396656
2009	1.42461	2.197668	3.193159	2019*	0.84523	1.154269	1.466646

\* only for three months (Jan –March 2019)

**Panel B:** Impact of GFC on the exchange rate volatility

	USD/INR	EUR/INR	GBP/INR
<b>Pre-Crisis Period 2000 to Aug 2007</b>	0.923	1.851	2.36
<b>Crisis Period Sep 2007 to Jan 2009</b>	2.601	2.803	2.886
<b>Post-Crisis Period Feb 2009 to Mar 2019</b>	2.123	3.025	3.875

**Table 2:** Granger Causality test for 10 pairs (among Inflation, Euro, GBP, USD, yield on 10 years Government securities) at Lag 1 and 2

Lags: 1				Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.	Null Hypothesis:	Obs	F-Statistic	Prob.
INFLATION does not Granger Cause EUR	227	1.97287	0.1615	INFLATION does not Granger Cause EUR	226	1.22704	0.2951
EUR does not Granger Cause INFLATION		0.82705	0.3641	EUR does not Granger Cause INFLATION		0.42280	0.6557
GBP does not Granger Cause EUR	227	1.20175	0.2742	GBP does not Granger Cause EUR	226	0.79394	0.4533
EUR does not Granger Cause GBP		2.12119	0.1467	EUR does not Granger Cause GBP		2.15472	0.1184
USD does not Granger Cause EUR	227	0.19423	0.6598	USD does not Granger Cause EUR	226	0.15398	0.8574
EUR does not Granger Cause USD		1.07080	0.3019	EUR does not Granger Cause USD		0.65901	0.5184
YIELD does not Granger Cause EUR	227	2.08501	0.1501	YIELD does not Granger Cause EUR	226	1.12939	0.3251
EUR does not Granger Cause YIELD		1.62069	0.2043	EUR does not Granger Cause YIELD		1.45854	0.2348
GBP does not Granger Cause INFLATION	227	0.00886	0.9251	GBP does not Granger Cause INFLATION	226	1.01507	0.3641
INFLATION does not Granger Cause GBP		0.01944	0.8892	INFLATION does not Granger Cause GBP		0.38134	0.6834
USD does not Granger Cause INFLATION	227	0.83816	0.3609	USD does not Granger Cause INFLATION	226	0.70889	0.4933
INFLATION does not Granger Cause USD		1.06853	0.3024	INFLATION does not Granger Cause USD		0.38219	0.6828
YIELD does not Granger Cause INFLATION	227	0.06348	0.8013	YIELD does not Granger Cause INFLATION	226	0.64932	0.5234
INFLATION does not Granger Cause YIELD		1.98605	0.1601	INFLATION does not Granger Cause YIELD		1.22302	0.2963
USD does not Granger Cause GBP	227	0.65620	0.4188	USD does not Granger Cause GBP	226	0.36369	0.6955
GBP does not Granger Cause USD		0.05962	0.8073	GBP does not Granger Cause USD		0.03774	0.9630
YIELD does not Granger Cause GBP	227	1.44010	0.2314	YIELD does not Granger Cause GBP	226	0.69839	0.4985
GBP does not Granger Cause YIELD		1.58132	0.2099	GBP does not Granger Cause YIELD		9.95673	7.E-05
YIELD does not Granger Cause USD	227	1.80375	0.1806	YIELD does not Granger Cause USD	226	1.38886	0.2515
USD does not Granger Cause YIELD		0.12808	0.7208	USD does not Granger Cause YIELD		1.07282	0.3438

**Table 3.** Granger Causality Test between Imports & Exports of India and select Exchange rates

USD/INR Exchange rate Vs Imports and Exports of India

Sample: 2000M01 2018M12  
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
D(IMPORTS) does not Granger Cause D(EXCHANGERATE)	225	0.42323	0.6555
D(EXCHANGERATE) does not Granger Cause D(IMPORTS)		5.03107	0.0073
D(EXPORTS) does not Granger Cause D(EXCHANGERATE)	225	0.59761	0.5510
D(EXCHANGERATE) does not Granger Cause D(EXPORTS)		1.70711	0.1838

EUR/INR Exchange rate Vs Import and Export of India

Sample: 2000M01 2018M12  
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
D(EXPORTS) does not Granger Cause D(EXCHANGERATE)	225	0.07316	0.9295
D(EXCHANGERATE) does not Granger Cause D(EXPORTS)		1.89200	0.1532
D(IMPORTS) does not Granger Cause D(EXCHANGERATE)	225	0.17068	0.8432
D(EXCHANGERATE) does not Granger Cause D(IMPORTS)		0.90317	0.4068

GBP/INR Exchange rate Vs Import and Export of India

Sample: 2000M01 2018M12  
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
D(IMPORTS) does not Granger Cause D(EXCHANGERATE)	224	1.09969	0.3348
D(EXCHANGERATE) does not Granger Cause D(IMPORTS)		1.37110	0.2560
D(EXPORTS) does not Granger Cause D(EXCHANGERATE)	225	0.52062	0.5949
D(EXCHANGERATE) does not Granger Cause D(EXPORTS)		0.49487	0.6103



# METHODOLOGY OF TEACHING LABOUR LAW VOCABULARY IN THE ACADEMIC SUBJECT OF LEGAL ENGLISH

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**Abstract:** *Studying the subject of Legal English is mandatory for the students of Law. Few of the important units of the subject of Legal English are the unit of Labour Law and the unit of Employment Rights. The emphasis of the units is a brief introduction to the nature of these types of law and a presentation, explanation, translation and practice of the relevant vocabulary. The paper „Methodology of Teaching the Labour Law Vocabulary in the Academic Subject of Legal English” deals with the various teaching methods used in the English for Specific Purposes classroom when teaching the vocabulary relevant to the subject matter of Labour Law and Employment Rights. The stress is on the types of exercises (vocabulary, reading and speaking), as well as the methods of conducting them in the classroom.*

**Keywords:** *Legal English, Labor Law, Employment Rights, methodology of teaching English for Specific Purposes.*

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## 1. INTRODUCTION

Vocabulary constitutes the major part of English for Specific Purposes (ESP) learning; thus, it is of great importance for Ss to build a consistent body of technical terms specific to their field of study. Indeed, vocabulary is but the basis Ss are required for their future careers, as well as the basis on which they shall build their ongoing field studies. As Mohan and van Naerssen indicate, „knowledge of the vocabulary of a subject area helps learners understand better their area of study because it broadens their knowledge” (Chirobocea, 2018). In addition, the best way to be successful in vocabulary acquisition is, as Woodward-Kron suggests, for Students (Ss) to be able to engage their specialist language with their disciplinary knowledge (Chirobocea, 2018).

Hence, teaching vocabulary is crucial for the ESP courses, since the course is aimed to teach Ss manage in English in their own academic field, rather than in some general social situation, i.e. to enable Ss to communicate within their professional environment, as well as to use resources, such as reading academic journals in English, using professional web-sites in English, etc.; and, not to mention to write their own academic papers in English. In order to be able to do all that, Ss should learn more than the aspects of the meaning of the words and the phrases (synonyms, antonyms, translation, definition and explanation), yet, also, their lexical form, such as spelling, pronunciation, part of speech; collocations (the possible combinations of the words and their usage in phrases); word formation (prefixes, suffixes and compounds), etc.

Unfortunately, Ss are not very keen on studying new vocabulary, so it is quite a challenge for the lecturer (L) to teach it and to motivate Ss to learn it, too. Similarly, Ss may find the process of learning new vocabulary monotonous, because it requires time, patience and revision, and in this instant technological era, learning vocabulary comes down to looking up the meaning of the new words on the cell phone applications or simply googling them.

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Due to those facts, Ls who teach ESP courses, on the one hand, should be, at least, familiar with the core vocabulary of the field of study; and, on the other, should use vocabulary teaching methods that are effective in long-term learning. The paper's aim is to offer a methodological approach to teaching vocabulary of a certain narrow field of Legal English, in this case, Labor Law. Moreover, the paper presents an example of methodology in teaching the unit of Labor Law alongside the unit of Employment Rights and is based on author's teaching experience.

## **2. LEGAL ENGLISH VOCABULARY**

Legal English, and ESP in general, is content-and-language integrated learning that, in theory, requires two lecturers: a language teacher and a subject matter teacher. However, in practice, it is always single English as a Second Language (ESL) lecturer with the knowledge of both language and Law. This indicates that the core of the Legal English vocabulary is restricted to merely the basic legal vocabulary, yet to the high-frequency words with specialized meanings. This perfectly adds up to the fact that Legal English is studied in the first year of the first cycle of Law studies, which means that Ss are not much familiar with the subject matter, that is to say, that they are still at the point of introduction into the field of study. Thus, teaching Legal English vocabulary indicates that the L should be able to introduce to the Ss not only the word/s or the phrase/s, but also their definitions and meanings, i.e. not only the vocabulary itself, but also the concepts of the subject terminology.

In addition, to teach Legal English vocabulary, a monolingual or a bilingual dictionary of law is needed. Also, apart from the standard General English (GE) vocabulary teaching methods, the L should use teaching methods that will not only teach Ss new vocabulary, but also make them use their previously acquired knowledge of the other academic subjects.

Furthermore, among the various strategies for discovering the meaning of the unknown words without using dictionaries is the strategy of guessing the meaning from the context. This is, actually, the first stage of the vocabulary teaching method – presenting the vocabulary. Legal terms are presented in a context-relevant short text and in the glossary related to the text. The new vocabulary can be presented with its synonyms or antonyms, or by matching the new terms to their definitions, explanations, synonyms or antonyms, abbreviation, first language (L1) equivalent, their collocation, etc.

Fortunately, some of the terminology is already known to the Ss. In that case, the L should check if the Ss understand the technical vocabulary and if they are able to use it properly and actively, which leads to the second stage of vocabulary teaching – practice. Follow-up exercises enable Ss use the new vocabulary in a suitable context and the context is indeed crucial for the process of learning new vocabulary. These follow-up exercises can be multiple choice or gap-filling. The former instructs Ss to choose the correct or most suitable word, and the latter instructs Ss to fill in the gap with the most suitable term. Finally, there are the speaking-oriented exercises that encourage Ss to actively practice the usage of the new, as well as the already established vocabulary.

Apart from the context, another factor of effective learning is the use of collocations. Namely, technical vocabulary combines more words as collocations than GE vocabulary. This makes ESP learning more complex, which requires more effort in combining the words and phrases correctly. L should assist Ss become familiar with the collocations, as well as become more aware

of the words that go together. In the case of Legal English, special emphasis, too, should be put on the Latin terms and abbreviations frequently used in legal forms and contracts.

Of course, one should always have in mind John Morgan's and Mario Rinvulcri's opinion, who presented their views in their study *Vocabulary* (OUP Oxford, 2004), that „new words are not learned mechanically, but associatively” (Xhaferi, 2009). This, of course, adds up to the greater context Ss face with their studies – the greater picture of their academic field assembled by all the other academic courses. Thus, the main role of the ESP L should be to enable Ss, firstly, understand correctly the technical vocabulary, and, secondly, use it independently and appropriately. Hence, the L should adjust their vocabulary teaching methods accordingly. Certainly, whatever method the L decides to use, it should be democratic, engaging, student-centered and participatory.

### 3. TEACHING LABOUR LAW AND EMPLOYMENT RIGHTS VOCABULARY

The unit of Labor Law is tightly connected to the unit of Employment Rights, so we have decided to teach them together as a single unit in two sections. The materials we use in class relevant for these units are extracts from the textbooks: *Speaking Legal English* by L. A. Borisova (Labor Law unit) and Практический курс основного иностранного языка английский язык. Профессиональный курс юридический. Юнита 4. by S. V. Smirnova (Employment Rights unit).

The textbooks provide various vocabulary-oriented exercises. The warm-up exercises are but an introduction to the topic of Labor Law. For example, Borisova introduces the Labor Law vocabulary by eliciting meaning from a context in a gap-filling exercise. She introduces a list of the core vocabulary relevant to the topic:

- To employ (v),
- To be permanently/ temporarily employed (phr.),
- Full-time employee (n),
- Part-time employee (n),
- Blue-collar (n),
- White-collar (n),
- To recruit (v),
- To dismiss (v),
- To make somebody redundant (phr.),
- Employer (n),
- Employment opportunities (coll.),
- Employment contract (coll.),
- Employment conditions (coll.),
- Unemployment rate (coll.),
- Fringe benefits (coll.),
- Child benefit (coll.),
- Unemployment benefit (coll.),
- Invalidity benefit (coll.),
- Sickness benefit (coll.),
- Maternity benefit (coll.),
- Social security (n),
- Insurance (n),
- Trade union (n).

Before doing the exercise, Ss with the help of the L define, explain and translate the words and the phrases. This can be done with vocabulary memo cards created by the L. The memo cards can be blue-tacked on the board and Ss might be encouraged to match the words and phrases with their definitions, or just match the parts of the collocations. In addition, Ss may group them in different groups, for example, in nouns/noun phrases and verbs, or positive and negative notions, etc. Finally, Ss can just be invited to discuss the meanings of the new words/phrases.

After they acquire their exact meaning, Ss do the exercise individually, in pairs or in small groups of 3–4. The exercise can be checked as a quiz. The L divides the whole class in two bigger groups and chooses a moderator. Each S of each group reads a sentence from the exercise, for example: „The trade union threatened strike action if its demands were not met”. – the underlined words being the ones that should be filled in (Borisova, 2007). Ss read alternately. The role of the moderator is to check whether the answers are correct, sound the buzzer if they are not, invite a S from the other group to provide another answer, and, at the end, give a point for each correct answer. The group with the greatest number of correct points is the winner of the quiz.

The gap-filling exercise is followed by a discussion exercise that encourages Ss to speak in the second language (L2), as well as practice the newly acquired vocabulary. The questions such as: „How long should vacations last?; Should children be allowed to work?; What problems may women face as far as employment is concerned?; What should the retirement age be?”; etc. (Borisova, 2007) are deeply challenging – they not only boost Ss’ creativity and thinking, but also inspire them to use their overall legal knowledge. L should make sure all Ss are involved in the discussion and state their own personal opinion. They should mind Ss’ pronunciation, grammar in use and sentence structure, not only their usage of relevant vocabulary.

The successive exercise is a reading exercise on the topic of employment laws in Japan. L encourages Ss read the text aloud, explain the new words or revise the old ones, as well as discuss the text and the topic in comparison to the employment laws in their own country. Two next texts are introduced – one on employment rights according to the English legislation and the other titled „EC employment law”, both from the Smirnova textbook. This combination of texts of the two different textbooks enables Ss not only revise vocabulary, but also expand it. The method of work on the other two texts is similar to the method of presenting the first text. Ss are encouraged to work on the vocabulary individually, in pairs and in small groups under the guidance and with the help of the L. In my personal experience, handmade memo cards have been always the best choice to present new vocabulary, so we do recommend using them in this exercise, too. These reading exercises may be concluded with a debate on the topic of „European Commission (EC) employment laws vs. employment laws in Japan – strengths and weaknesses” with possible solutions of improving the laws’ negative sides.

The session may end with homework (HW) on the topic of „How to reduce unemployment rate”. The HW should be done individually, in pairs or in small groups as a project presentation and presented in the revision class. L2 to L1 translation can be offered as a useful concluding revision exercise. L chooses the most important extracts from the texts. L and Ss work on the first extract together. Afterwards, L divides the whole class into groups of 3–4 and assigns the other extracts to the groups to work on. This time, Ss work without the help of the L. At the end, they all read and edit the translations together and with the help of the L. Special emphasis is put on the proper translation of the legal terms, yet one should not forget that translations should sound natural and authentic.

#### 4. CONCLUSION

In conclusion, teaching specialized vocabulary is essential to the ESP classroom. Thus, a productive vocabulary learning process is essential. In that sense, vocabulary should be taught in a well-defined context and through various participatory exercises: gap-filling, reading, translation and communicative exercises, since the PPP Approach (Presentation, Practice, and Production) is the best way for vocabulary acquisition. Hence, when teaching vocabulary, Ls should first use the Task-Based Approach to introduce new vocabulary, then the Communicative Approach to practice it. The final goal should be enabling Ss independently and accurately use legal terminology.

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# PRECARIOUS WORK AND HUMAN TRAFFICKING – GLOBAL CHALLENGES, GLOBAL SOLUTIONS

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**Abstract:** *The paper focuses on a problem identified as one of the scourges of modern society - human trafficking. The text contributes to the literature on the topic by analysing the link between precarious work, unemployment and their interrelationship with migration, and the growing vulnerability of large groups of people to fall into trafficking. Through a secondary analysis of documents and a statistics analysis, gathered by international institutions, a context is presented in which the vulnerability of people to human trafficking is increased and defends the assertion that a solution to the problem should be sought at the macro level - by adopting international agreements on joint activities and efforts against this phenomenon, as well as on the meso and micro level.*

**Keywords:** *poverty, human trafficking, precarious work.*

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## 1. INTRODUCTION

In the modern world many opportunities for work, travel and other various forms of realization arise. We live in a world of unprecedented human mobility. Migration today is more than ever a global issue - a priority for all governments.

The world's workforce has, also, never been more mobile. Every person travelling from country to country is trying to secure a better life for themselves and their family. It is exactly the economic motives which drive migration, together with the willingness to travel and the availability of informal connections and networks [1]. Everyone – skilled or unskilled, with work permits or without – is seeking an identical goal: more opportunities for realization and a better life for themselves and their family. Migration is practically the oldest strategy to combat poverty.

The lower security, created by all these factors, is largely exploited by human-traffickers. Trafficking in human beings has, predominantly, been seen as a crime which affects mostly women, but over time it has been acknowledged that men and boys are also vulnerable to this crime, especially trafficking for labour exploitation. But what are the circumstances that favour human trafficking and labour exploitation?

## 2. FACTORS FAVORING HUMAN TRAFFICKING

According to researchers [2], human trafficking was formed as a social problem in the end of the nineteenth century in Europe and North America when industrialization, urbanization and unequal distribution of wealth lead to an increased migration. The phenomena gain momentum in the twentieth century and is constantly rising to reach its peak in today's world in the face of globalization and free movement of people.

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This natural mobility and labour migration can result in enormous communal benefits for individuals and countries, of both origin and destination, when done in a safe and orderly way. Unfortunately, statistics remind us that migrants are exposed to disproportionate risks of exploitation and abuse in seeking better job opportunities away from home. Every year, millions of migrants are trafficked within and outside of their country's borders and find themselves trapped in forced labour or victims of sexual exploitation.

The prosperity of human trafficking is caused by many things, but firstly it is affected by poverty and material deprivation, followed by factors such as lack of employment in the home country and lack of social or economic opportunities for development; dangers from military conflicts and political instability, and human rights violations [3, p. 424].

In regards to studies and researches on the topic worldwide, this is the picture in numbers:

- In 2017, nearly 736 million of the world's population still lives in extreme poverty, with less than \$ 1.9 a day [4];
- According to the International Labour Organization, 40 million people are victims of modern slavery in 2016, with nearly 25 million of them suffering from forced labour [5];
- More than 700 million women are married before they reach the age of 18, and one in three - before the age of 15 [6];
- In the period 2015-2016 over half (56%) of trafficked persons were victims of sexual exploitation. About a quarter or 26% were trafficked for labour exploitation, while the remaining percentage consisted of forced begging and organ trafficking [7];

In many cases, both men and women are forced to work in an environment of violence, threats and psychological manipulation. Employees often find themselves indebted through non-transparent recruitment practices and detrimental working conditions, while at the same time being subjected to tremendous pressure from their families who expect from them to send money, so they can survive in their country of origin.

Other forms of exploitation remain more hidden, but not less harmful - life-threatening working conditions, symbolic pay or household services, vague clauses on income deductions and additional taxation; unacceptable restrictions on personal freedom within the working time, and even beyond the working day. These and other similar characteristics, as well as new studies [8], demonstrate that these can be understood as precarious jobs which combines the ideas of insecure employment and low-quality work, and rather indicates the results of a series of forces operating for several decades. It is no longer sufficient to just talk about the availability of work, but also about its quality. In many places around the world, although people are employed, they cannot escape of the state of poverty they are in. Poverty and precarious work can be defined as the main determinants for vulnerability of falling into labour exploitation conditions and human trafficking. Situations of financial scarcity, when you have nothing to put on the table or what to clothe your child with to go to school, bring parents to a position to accept offers for work abroad.

The economic and technological developments, we are seeing today, according to researchers [9], give more chances for the advancement of highly qualified and well-educated people, and the risk of unemployment, exclusion from the labour market and social marginalization is increased for the low-skilled. Social and political changes not only lag behind, but also lead to a reduction in labour security. The latter has been displaced by the idea of economic rationality,

leading primarily to global business efforts for reducing labour costs and increasing profits. The result, according to Standing [10], is the emergence of a dangerous new class - precariat - consisting of millions of people around the world living without any security, united by characteristics such as poor lifestyle, ill paid work, poor working conditions and social insecurity. According to Eurostat data only in the EU27, the percentage of the working poor in 2017 was 9.4%, with an increase of this percentage steadily trending since 2010. Major social inequalities and regional disparities create significant difficulties, especially in poorer countries (such as Bulgaria). These regional disparities prove to be a significant factor, prompting people, especially the younger, to look for work abroad [8].

And in order to not only rely on figures and data, we can briefly present two specific cases of victims of trafficking who have received help from the IOM mission in Bulgaria:

- R. is a village boy who wants to have a good life, to be able to afford an expensive phone and to take his girlfriend to a restaurant and a club in the nearby bigger city. So, he needs money, and the possibilities for work in his village are limited. At the bus stop in the centre, R. coincidentally sees an ad about blueberry pickers in Sweden. The promised payment seems great to him, and without much thought, R. calls the indicated phone number and not long after he is taken from the same station, driven to Sofia and from there with many more like him – to Sweden. It turns out that in Sweden he will not pick blueberries. R. and the rest in his group are forced to beg on the central boulevards and in front of large stores in Malmö.
- C. is 19 years old, from a small Bulgarian town. After finishing her secondary education, she is faced with the decision of what to do next. She wants to travel, but she needs work to support herself. Acquaintances promise her an opportunity for work in Greece, so she leaves Bulgaria. It turns out she will not work as a waitress in Athens, as previously agreed. They take her passport and all her documents, lock her up and force her to prostitute.

The forms of human trafficking, where people are cruelly exploited by other people are largely diverse and bring enormous profits to criminals [11]. The latter takes advantage of people's vulnerability and their desire for a better life, which means that the struggle with this criminal phenomenon depends not only on the capacity of law enforcement but also on a number of other conditions - economic, social, cultural. It would be difficult to achieve positive results in combating human trafficking, unless the potency of factors such as poverty, inequality, discrimination, political instability and military conflicts is reduced. Therefore, measures should be implemented on both the international and national level. The efforts of each citizen individually are of particular importance.

### **3. JOINT EFFORTS IN COMBATING TRAFFICKING IN HUMAN BEINGS**

The international community and state leaders have recognized the significant scope of human trafficking and the numerous problems that need to be surmounted in order to achieve success in combating this crime. The inclusion (indirectly and directly) of Countering and Combating Human Trafficking in the Sustainable Development Goals 2030 is a proof of this action. The Sustainable Development Goals replace and build on the Millennium Development Goals, adopted at the United Nations Headquarters in September of 2015, and focus on people, prosperity, peace and partnership. A main priority of the Goals is to “balance the three dimensions of sustainable development: the economic, social and environmental.” [12] They are trying to respond

to the global challenges, faced by all people and related to poverty, inequality, climate change, social progress, justice and peace. The Goals are interrelated, and their main task is to “leave no one behind”, i.e. everybody gets what they need to live a decent life with access to equal opportunities as everyone else, this being achieved with the help of the governments of states.

Three of the Sustainable Development Goals explicitly concern human trafficking - number 5, number 8 and number 16. Namely, “Achieve gender equality and empower all women and girls”, “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and “Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.”

Recognizing the lack of gender equality as a significant prerequisite for vulnerability to trafficking and exploitation of women, in sub-objective 5.2, the international community calls on States to “Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.” Many of the other sub-targets for Goal 5 are related to trafficking, including the elimination of harmful practices such as early marriages and the call for valuation of unpaid care and housekeeping. Even though the balance between work and family life has been widely discussed in scientific literature over the last two to three decades, especially in view of the opportunities that technology offers for telework [13] in many societies there are still large gender gaps in the responsibility for childcare and adult care, pay and job choices and not in women’s benefit [14], [15]. During the 21st century, in many societies and ethnic groups, women still do not have the same rights as men.

Efforts in terms of gender equality would not be effective if there were no conditions for development in the individual countries - economic and social. People’s development firstly involves access to quality education and quality work, enabling a decent life. Objective number 8 and its sub-targets focus mainly on the access to decent and stable work. This requires investment by the state in creating sustainable jobs, a secure environment for living and working by reducing corruption levels, creating good conditions for foreign investment and higher economic growth. In this way, one of the main reasons for trafficking, namely poverty and precarious work is addressed.

Goal 16 addresses the efforts to “Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.” Sub-objective 16.2 calls on nations to “End abuse, exploitation, trafficking and all forms of violence against and torture of children.” Other sub-objectives, such as the battle against organized crime, the rule of law and the reduction of all forms of violence, are also related to the elimination of trafficking in human beings.

In addition to the adoption of the Sustainable Development Goals in September 2015, as well as the reform of the European legal framework, strategies and directives on human trafficking, another key event has taken place, which fully deals with migration as a global phenomenon – the adoption of the Global Compact for Safe, Orderly and Regular Migration by the UN in December 2018. The development of the Global Compact on Migration is a historic opportunity for the international community to put an end to fragmented activities. The formal start of the process of drafting a Global Migration Pact was in September 2016, when the UN General Assembly adopted the New York Declaration on Refugees and Migrants [16]. Since this year, the EU has

been actively and continuously involved in the process of drafting the Global Migration Pact through a coordinated approach. A successful policy is measured not only with the increase of people's well-being in their home country, but also with the protection and integration of anyone who wants to build their lives in another country.

In addition to a supranational level, efforts should also be made at the medium and micro levels. On one hand are educational institutions, non-governmental organizations, trade unions, employers and others. They are all of great importance for the quality of labour market relations in a given country, for discrimination against women or ethnic minorities [17], [18]. On the other hand, each of us can make efforts not to encourage the trafficking and exploitation of people. As consumers, while continuously looking for a better balance between the price and quality of goods and services, we could consider the workers who produce certain commodities or help a service to reach us - the conditions in which they work, and the pay which they receive for their labour.

#### 4. CONCLUSION

No industry sector today is immune to labour exploitation. Thousands of people close to us, live and work in precarious conditions. Regardless of the nature of the business – sewing, construction, or tourism – we can be sure for at least this much: low pay, forced labour on the brink of survival, and unfair and non-transparent commercial and employers' practices do exist.

Exploitation and human trafficking are so widespread that they can be defeated only by a massive approach involving all stakeholders - governments, employers, trade unions, workers and consumers of end products and services. Especially end-consumers like all of us, we need to unite a voice in support of governments and local communities to insist on decent working conditions for all. Legislation in this area should be made transparent and protecting the rights of workers.

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# WAREHOUSING IN LOGISTICS – MAIN REVIEW OF BULGARIAN RESEARCH CONTRIBUTION

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**Abstract:** *Logistics and supply chain management are becoming more and more important, and the reason for that is the transformation of the markets and the need for accurate management of material flows. For overall business success it is now very important to understand the elements of the logistics systems and especially warehousing and transport. The article is focused on the research experience of warehousing in Bulgaria. The research method is based on using online bibliographic systems, registers and other information services and reveals potential warehousing research areas.*

**Keywords:** *warehousing, logistics, research.*

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## 1. INTRODUCTION

In order to carry out their activities, business organisations have to manage material flows in one form or another. This is also the reason for the growing importance of logistics, which, as a subject of management, encompasses material flows and related information and other flows [1, p. 14], the goal being to ensure effective movement of the former within the supply chain. The main objective of logistics is to ensure tangible, material flows that have a visible presence in reality, that are real, and the question is how to ensure their movement to the location where they are needed. These material flows are characterised by having a place of origin and a destination point. In essence, this is a supply chain, starting with unprocessed raw materials and ending with the end customer using the finished products. The supply chain links many companies together [2]. It is, in essence, a system involving many organisations linked together, and they all function to ensure the movement of material flows from their place of origin to the place of consumption. This system consists of different subsystems, the most important being warehousing and transportation. They are part of the logistics system foundations [3], and are of particular interest for several reasons. Firstly, they can be identified and analysed at different stages of movement of material flows—supply, production and distribution—and secondly, the costs associated with their implementation represent a significant proportion of overall logistics costs. Under the current conditions of increased competition, they are becoming a potential topic for scientific and applied research as it attempts to find new solutions for better management and related expense reduction.

There are other arguments regarding the importance of these systems, related to the analysis of the logistics system. One of the classical approaches to analysing those systems considers them a cluster of points and links because material flows are not constantly on the move, and they often need to be stopped for one reason or another. In this case, the logistics system is seen as a set of points in which material flows stop their movement and the links between them are interrupted [4, p. 25]. The cluster of points includes warehouses and processing facilities, while transportation belongs to the cluster of links. Warehousing as a complex of activities is par-

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ticularly necessary for the organisation's operations related to sales forecasting [5]. Warehousing, including materials handling and packaging, is a particularly important part of integrated logistics [6, p. 39], and its absence from a logistical system is unthinkable because a number of related activities would not be feasible and thus its absence would compromise the functioning of the whole system. Essentially, warehousing is a subsystem of logistics related to the provision of conditions for material flow management activities, such as storage [7]. Warehousing, which is essentially performed in storage facilities, plays an important role in the logistics system and cannot be explained with a single definition. This, in turn, implies defining warehouse systems within a broader frame in the context of the logistics system.

Warehousing systems are complex and they need to be considered from both economic and technical points of view. Therefore, finding a unified definition is difficult. In general, the warehouse is defined as: a large building where raw materials or manufactured goods can be stored prior to their distribution for sale [8]. Warehousing definition can be upgraded because they have a much more important role in logistics [6, pp. 380–381]. This suggests the possibility of looking at the economic importance of warehouses at both the logistics level in the organisation and in the context of the supply chain. For this reason, a number of authors define warehouses in different ways, emphasising their importance from a different point of view. Despite the disparities, economic views can be pooled around the fact that a warehouse is primarily a place where the main warehouse activities, including the receipt of product, storage, shipment, and order picking, are carried out. Warehousing is a conscious and purposeful activity in the storage of inventories that ensures a normal flow of production processes and consumption [9, p. 10]. In respect to their technical nature, warehouses are complex facilities, providing conditions for carrying out these activities. Successful storage management can only be achieved with synchronisation between these economics and technical aspects. Therefore, a number of aspects related to the technical design, operational and organisational structure, and the corresponding coordination [10] should be linked to the design of the storage systems. Prioritising one way or the other may lead to irrational use of the organisation's resources. It is clear that the components of the warehouse should be organised in order to ensure a cost-effective and efficient movement of delivery and orders [11] among supply chain partners.

These definitions do not declare the essence of the warehouses because they also play an additional role in the functioning of the logistics system, and it is not correct for them to be seen as an expense factor simply because material flows come to standstill at the warehouse.

Warehouses have important functions that increase the efficiency of the logistics system and improve customer service, which can lead to more benefits than expenses. The functions of the warehouses are directly related to the way they are used for logistics purposes and can be conditionally divided into the following groups [1], [3], [6], [12]:

- Storage of raw materials and products;
- Consolidation of material flows;
- Breaking and bulk of material flows;
- Product finishing and product customisation postponement;
- Product mixing;
- Cross-docking;
- E-commerce order fulfilment;
- Sorting;
- Reverse logistic centres.

Warehousing is definitely not only storage of material flows. All of the discussion above represents an argument that warehousing is an important research area that is part from the logistics systems. That is why the research scope could not be defined tightly, which supposes differentiation of the warehousing research topics by many criteria, and this explains why the current paper cannot reveal all of the aspects. For the current paper it is possible to define that the research purpose is to evaluate the main part of the research paper in the field of warehousing in Bulgaria as well as to summarise the current status of the research and to define possible areas for future works.

## 2. METHODOLOGY OF THE RESEARCH

The evaluation of the Bulgarian research contribution was based on a literature review in the field of warehousing in logistics. For data collection different approaches were employed, including the use of different information services to identify the main publications for the period of the last five decades. For data collection were mainly used the COBISS Platform (Co-operative Online Bibliographic System and Services) supported by the National Library that covers data about books, articles, etc. (nearly 425,000 books, 410,000 articles, 40,000 journals, 1,000 CDs/DVDs, etc.) [13], the national books register [14] and also the informational registers provided by some of the Bulgarian universities as well as bibliographic reports prepared by the library information service.

The main filter for the searches was the publications should be mainly by Bulgarian authors, or over 50%. The used keywords for the searches were: warehousing, warehouse/s, logistics, storage, and their relevant combinations (and their translation into Bulgarian). The scope of the research covered only scientific items such as books, textbooks, articles, dissertations. Periodical papers were not covered.

Research indicators used in the article to evaluate the Bulgarian research contribution in the field of warehousing were: publication format, publication scope, timeframe of the research and authorship.

## 3. RESULTS AND DISCUSSION

The results of the research are based on several hundred publications meeting the chosen criteria and these results were the reason to extend the search string during the research. Nevertheless, the search results provided significant data and a variety of books, textbooks, articles, and dissertations were studied in detail. The main findings could be classified and discussed in four main research indicators.

**Publication format** – for this indicator the paper covers books, conference papers, scientific articles, monographs and dissertations. From the research data it is possible to conclude that the warehousing topic is studied mainly in two directions. The first one is research tightly related to the warehousing problems such as warehousing in the different sectors of economics, or warehousing of a specific material flow. The second alternative is to research the warehousing problems in the context of the logistics systems. A typical example here is to study the logistics practices in Bulgaria, and one of the covered subtopics is warehousing as part of the overall logistics system, as well as the transport, inventory management, customer service, information systems etc. Unfortunately, most of the publications review warehousing indirectly; most of them are focused on logistics and supply chain management problems and this reveals potential

for additional research in the warehousing area. This is possibly the main reason why, for the quantitative measurement of the research format, it is possible to conclude that most of the research publications are conference papers, books and textbooks.

Another important result that could be mentioned is the *data warehousing* which is a specific scientific area in the field of informatics, but during the searches for the string *warehousing* there were mixed results and it was necessary to apply additional filters.

**Publication scope** – warehousing is an interaction between economics and technical problems and this is reflected in the scope of the research papers. They could be classified into these main categories: economics issues concerning warehousing, technical problems related to warehousing, architecture problems of the warehouse buildings, warehousing in military systems, and law problems concerning warehousing. According to the publication scope indicator it is not possible to make any significant conclusion about the share of any of the different publication types. Regarding the scope, it is possible to say that quantitative research methods based on questionnaire data are not very popular approaches, and this fact reveals potential for future works.

**Time frame** – before the Second World War a significant number of the works are related to the military problems of warehousing. After that, maybe because of the change of the structure of the industry in the country, there is an increase in works related to warehousing of different products [15], [16], [17] etc. After that there is a positive trend in the research for economics-related works, and this is a result of the growing importance of the logistics in the business and in the science but unfortunately in most of these works warehousing is reviewed in the context of logistics systems. During the period 2010-2018 there is a positive trend in monograph research papers and text books related to business logistics, logistics systems and different logistics subsystems, which could be explained by the overall world growth of research in this field.

Another important evolution stage that we can mention is the appearance of topics at the end of the 70s related to high storage systems, automated warehousing and digitalisation [18]–[20] which indicates importance for building knowledge fundamentals for developing and using high effective warehousing systems in the country.

**Authorship** - Another research indicator is the authorship and the number of authors of the scientific papers. The current model for scientific collaboration is that most publications have one to three authors. There is a potential for expanding the interdisciplinary scope of the research practices by involving different specialists.

During the research it was found that there is a difference in the scientific works by the used language. Most of the authors, especially in the last two decades, have published works not only in Bulgarian. The practice now is to focus on publishing journal articles and conference papers focused on specific warehousing and logistics problems also in other languages, mainly in English.

#### 4. CONCLUSION

In general, it is possible to conclude that warehousing problems have their research fundamental basis but they have huge potential for future works. In modern practice the warehousing systems are studied mainly as part of the logistics systems as systems related to storage of selected material flows - in general works cover mainly economics and technical issues. Their role in the

national economy in the general logistics model—where the main participants are the manufacturing and trade companies and the supporting ones are logistics service providers—could be studied in more detail in the future with quantitative methods and case studies. This fact also reveals different opportunities for future international works in many directions, such as warehousing practices in logistics and in supply chain management, and comparison of these with the leading international organisations to evaluate the differences. Also, there is a gap in the interdisciplinary works which could be considered as a potential area for improving warehouse efficiency in logistics practice.

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# THE ASSET MANAGEMENT CONTRACT OF NATIONAL ASSETS IN HUNGARY

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**Abstract:** *The aim of the paper is to give a short outlook on asset management contract of the so-called national assets (this terminus covers all the assets of the Hungarian State and the local government according to Act CXCVI of 2011 on national assets). We would like to give a definition for asset management according to different views in legal and economical literature, after this we will present the current regulation of these special contracts with its subjects, its objects and the rights and obligations of each subject. We come to the conclusion: this act is considered to be a part of public law, but it consists of important regulation in connection with private law, and lots of rules can be understood only in the light of civil law.*

**Keywords:** *asset management, asset management contract, Hungary, national assets, public property management.*

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## 1. INTRODUCTION – NOTION OF ASSET MANAGEMENT

The aim of this paper is to give a short outlook on asset management contract of the national assets in Hungarian law. First of all, we have to discuss the definition of asset management, its meaning as a legal institute.

We can meet with this terminus in Hungarian law in public law; it has a strong connection with the assets and their management of the Hungarian State and the local governments. Asset management is a complex task, and it depends on the composition of the assets, their characteristics, and the content of legal relation of the asset management, especially the rights and obligations of the administrator of estate. We cannot find so many scientific articles in the Hungarian legal literature related to asset management in order to define its notion. What we find at level of legal acts is in Act CXCVI of 2011 on national assets (hereinafter referred to as Nvt.), and these provisions refer mostly to the above mentioned rights and obligations of the administrator of estate who exercises the rights and obligations of the owner in almost the same way as the owner could do it. [1] To explain this “almost the same way”, we can give an example: the administrator of estate is not allowed to dispose over the national asset and this person can encumber it only in limited extent. [2] The rights and obligations of the administrator of estate are not the same as the rights and obligations of the owner; it is enough to examine the direction of practicing the rights of the owner. The owner practices the rights for his or her benefit; and the administrator of estate practices the rights for the benefit of another person. [3]

There are more possible ways to define the notion of asset management and asset management contract; one of the most laconic definitions is that asset management contract is a legal relation in law of obligations between the owner and the administrator of estate in order to handle the asset management. [4] This definition is a proper starting point but we cannot get to know more about this legal institute; this is why we give more definitions:

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- a) Asset management is exercise of one or more rights and obligations of the owner (right to possess, right to use, right of beneficial enjoyment and the right to dispose over property) over things, group of things or other rights for the benefit of a person who must be different from the administrator of estate. [5] This approach is not proper in connection with national assets in current Hungarian legal regulation: for example, the right to dispose over property does not belong to the administrator of estate.
- b) Another definition is that asset management is an activity practiced in the name of the owner instead of the owner. It is based on the intention of the owner, and its purpose is to exercise rights and obligations of the owner over the whole property of this person or on its certain part. [6]
- c) According to Tamás Sárközy, asset management means basically the preservation of the assets, stopping or reducing the devaluation, furthermore, increasing value in economical approach. The administrator of estate is collaborator of the owner: the administrator of estate can be handled as accessory after the fact; since the administrator of estate exercises the rights and obligations of the owner over the whole property of this person or on its certain part. [7]

To draw some consequences deriving from these definitions, we can define asset management in this way: asset management is exercising one or more rights and obligations of the owner not by the owner, but for his or her benefit; the administrator of estate is obliged to preserve the substance and value of the assets. With respect to the topic of this article, it must be in connection with national assets.

## **2. THE ASSET MANAGEMENT CONTRACT**

### **2.1. The subjects of the contract**

Nvt. gives an exact enumeration who is allowed to become administrator of estate, in other words one of the subjects of the asset management contract. It varies on the owner of the assets: the Hungarian State, the local government or a legal person of a church. To summarize, the administrator of estate can be budgetary authority, public body, local government, ethnic government, association, ecclesiastical legal person, commercial entity, in which the state or the local government holds 100% of the participation interest separately or altogether, companies in which the 100% of the participation interest is owned by companies operating with state or local government membership, [8] among other legal institutes. The ministerial argument of Nvt. gives an explanation: the administrator of estate has various and strong rights, this person almost can be considered as an owner, therefore it is not worth to give this legal position to such legal entities those are run by natural persons and legal persons partially or fully. For example, it is possible that there are legal persons where the minority (counting the number of shares) has a bigger influence on decision-making for example with different kinds of preference shares regulated in Sections 3:230-3:235., 3:240. in Act V of 2013 on Civil Code (hereinafter referred to as CC).

Another subject of these contracts is that legal entity who exercises the rights and obligations of the owner over the assets. [9]

## 2.2. The objects of the contract

The direct object (“human behaviour”) of the asset management contract is the asset management itself, the indirect object is the property described by the act on national assets. This latter regulation has its bases in Fundamental Law of Hungary: The property of the State and of local governments shall be national assets. The management and protection of national assets shall aim at serving the public interest, meeting common needs and preserving natural resources, as well as at taking into account the needs of future generations. The requirements for preserving and protecting national assets and for the responsible management of national assets shall be laid down in a cardinal act. (This act is the Act CXCVI of 2011 on national assets.) The scope of the exclusive property and of the exclusive economic activities of the State, as well as the limitations and conditions of the alienation of national assets of outstanding importance for the national economy shall be determined in a cardinal act with regard to the goals [10] mentioned above. [According to Article T) (4) of the Fundamental Law, cardinal acts shall be acts, the adoption and amendment of which requires the votes of two thirds of the Members of the National Assembly present.] National assets with high importance from the aspect of national economy are non-marketable; [11] they cannot be transferred (unless otherwise is provided in Nvt.), cannot be encumbered (with some exceptions), cannot be pledged, cannot be established divided estate on them, on the other hand, the general rule is that they do not have to be utilized by concession. [12]

Since assets management contracts are contracts not only in their names, but also in their content, rules of law of obligations laid down in Civil Code must be applied. There are also some provisions of which application is excluded: for example, in that case if a legal act names the administrator of estate, rules of statutory obligation to contract in Section 6:71. of Civil Code [13] must not be applied.

The indirect object of asset management contract can be also rights that belong to the Hungarian State; based on the Act CVI of 2007 on state assets the rules of asset management for things must be applied. [14]

## 2.3. The content of the contract

As we examine the legal regulation in connection with the content of these contracts, the administrator of estate shall exercise the rights and obligations of the owner, and also the accounting obligations (as prescribed in the Act C of 2000 on accountancy), unless otherwise is provided in the legal act or in the asset management contract. But there are different rules compared to the owner:

- this person cannot transfer or encumber the managed assets with exceptions; therefore, he or she is allowed to encumber among others with beneficial use, servitude, but all of these must be based on law;
- the managed asset cannot be pledged;
- the administrator of estate cannot establish divided estate (divided estate means the ownership of the building belongs to its builder and not to the owner of the land);
- only central agencies are allowed to transfer the rights and obligations derived from asset management contract, but they also cannot transfer the rights and obligations in connection with real estate; [15] other legal entities who are allowed to become administrator of estate cannot transfer the rights and obligations derived from asset management contract;
- he or she cannot give owner’s letter of consent in connection with the managed assets in case of court proceedings and authority proceedings with smaller exceptions.[16]

The owner must pay fee for asset management, because asset management is free of charge only in cases of performance of public duties, providing public service towards the people and in necessary measure. [17]

Section 109 (1) and (2) of the Act CLXXXIX of 2011 on local self-governments of Hungary repeats the regulation of Nvt. in certain way: the municipal council may establish right of asset management things in ownership of local government based on Nvt. in connection with the transfer of public duties; the municipal council is allowed to enter into agreement only with persons who are defined as possible subjects in Nvt. Detailed rules of consideration of right of asset management, voluntary assignment, exercise of right of asset management and control of asset management must be regulated in local government ordinance; [18] these issues belong to the content of the contract. The administrator of estate must separate income and direct costs deriving from use and operation of the managed assets, this person must separate the expenditures and must tolerate the owner's control.

The special rules laid down in Act CVI of 2007 on state assets must be also taken into consideration if the national assets are state assets. The administrator of estate has also the same rights and obligations as they are determined in Nvt. This person must pay fee for assets management, must fulfil the obligations and use in that manner those are laid down in legal instruments and in the assets management contract. In case the administrator of estate does not perform these obligations, the person who exercises the rights and obligations of the owner over the assets can terminate the asset management contract effective immediately. [19] The parties are allowed to agree not to pay fee for assets management but to perform another kind of duty. [20] The administrator of estate is responsible for all the damages - those are because of use against the contract or legal instruments; except for proving that the procedure was with the care that is generally expected from administrator of estate of state assets under given circumstances. [21] This Government decree sets up a higher level of civil law liability for administrators of estate: it is based on fault, [22] therefore it has a subjective legal base, but the care is compared to other administrators of estate of state assets.

### 3. CONCLUSION

A wide range of things belong to those national assets, where asset management contracts must be entered into agreement. Due to this circumstance, it is worth to take a short outlook on the basic rules of this legal institute. Asset management and asset management contract themselves are not determined in Hungarian legal acts, therefore a proper notion should be created. Since this contract has its bases both in public law and private law, all the necessary definitions must be known and interpreted correctly. The act on national assets is considered to be a part of public law, but it consists of important regulation in connection with private law, and lots of rules can be understood only in the light of civil law. This article attempted to present the basic rules of asset management contract, one of the methods for public property management in Hungary.

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  - (1) Where an obligation to contract is prescribed by law, and the parties do not conclude the contract, the court shall have powers to establish the contract and to define its terms.
  - (2) By disclosing the necessary details and sending the necessary documents, the obligee may request the person who is subject to contracting obligation to make an offer. The obligor shall present his offer within thirty days following the effective date of the request.
  - (3) If the request for an offer does not contain the necessary details or documents, the obligor shall request these details and/or documents within fifteen days following the effective date of the request. In that case, the deadline for presenting the offer shall commence upon the provision of the missing details and/or documents.
  - (4) Conclusion of the contract may be refused if the obligor provides proof that he is incapable of performing the contract or there exists the right to withdraw from or to terminate the contract.
- [14] Act CVI of 2007 Section 27 Subsection (3)
- [15] Nvt. Section 11 Subsection (9)
- [16] Nvt. Section 11 Subsection (8)
- [17] Nvt. Section 11 Subsection (13)
- [18] Act CLXXXIX of 2011 Section 109 Subsection (4)
- [19] Act CVI of 2007 Section 27 Subsection (2a)
- [20] Government Decree 254/2007. (X. 4.) Section 10 Subsection (3)
- [21] Government Decree 254/2007. (X. 4.) Section 9 Subsection (4)
- [22] If somebody's act does not meet with CC Section 1:4., it is the case of fault.
 

CC Section 1:4. [*Principle of generally expected standard of conduct. Fault*] (1) Unless otherwise provided in this Act, in civil law relations, one shall proceed with the care that is generally expected under the given circumstances.

See also Leszkoven, L. (2018) *A polgári jog alapelvei*, in Barzó, T., Papp, T. ed. (szerk.): *Civilisztika I. Dialóg Campus Kiadó, Budapest*, 36-38.



# ROMANIA IN THE CONTEXT OF SUSTAINABLE AND FUNCTIONAL GLOBALIZATION. MACROECONOMIC POLICIES AND STRATEGIES FOR MANAGING THE REGIONAL AND GLOBAL INTEGRATION OF THE ROMANIAN COMPETITIVE SPACE

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**Abstract:** *The emerging assemblage of the absorption markets, managed by the very nature of the competitive mechanisms, manifests in the contemporary period ample diversifications under the incidences exerted by the direction of foreign capital flows. The case of Romania is by far a particular one, delimited by the emergence of the consumption behavior of the population, which enables the effects of dislocation of the forms under which the operating procedures of the multinational corporations are usually portrayed. Certainly, the economic and institutional reforms undertaken and carried out by Romania in the long term, even since 1990, have been and continue to represent the central pivot in boosting competitive advantages and, last but not least, in favoring an ascending trend of social welfare as an expression of the degree of economic development and meeting the requirements of integrated competition spaces. Undoubtedly, the economic and institutional reforms undertaken and carried out by Romania in the long term since 1990 have been and continue to be the key pillar in boosting competitive advantages and, last but not least, in favoring an ascending trend of social welfare, that expression of the degree of economic development and satisfaction of the requirements of the integrated competition spaces. In this regard, multinational corporations can exert direct and indirect effects on the evolutions in the spectrum of investment development from implantation economies, the latter being able to be argued in the form of actual investment activities or those carried out under the system of inter-state corporate cooperation, by absorbing the potential of local firms.*

**Keywords:** *Romania, globalization, macroeconomic, integration, competition.*

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## 1. INTRODUCTION

The process of Romania's economic development has essentially, over time, multiple manifestations, but being the result of the investments made by multinational operators in the economy is not one of them. Romania's competitive advantages are diversified: from the demographic potential to the specific infrastructure and associated technological processes or attuned to the case associated to those. Rendering them fruitful in time has led to an ever-increasing consolidation of an organic integration perspective and structural fluidization of the multinational corporations' mechanisms within the Romanian management systems. More than that, the contribution of multinational corporations to Romania's economic development has, in the current period, substantial developments, materialized in particular in the connection of the technical and technological structures to the industrial standards imposed by the ample process of globalization of the contemporary world economy.

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## 2. CONTRIBUTION OF INVESTMENTS MULTINATIONAL CORPORATIONS TO THE ECONOMIC DEVELOPMENT OF ROMANIA

In the world spectrum, the distinction between outsourced forms of capital source establishment, specific to multinational operators (bank loans, bonds or even portfolios of titles assimilated in the construction of investment capital) whose purpose is to build local investment capacities and direct investment of multinational corporations, consists in the fact that they only favor the structural internalization of external corporate economies in the presence of sufficiently competitive subsidiaries in terms of the efficiency of local, regional or even global production processes. In this regard, multinational corporations can exert direct and indirect effects on developments in the investment development spectrum of implantation economies, which can be argued in the form of actual investment activities or those carried out under the system of inter-state corporate cooperation, by absorbing the potential of local businesses.

A particular analytical problem is represented by the impact of multinational corporations' investments on the Romanian economy, these being approached from the perspective of the driving effects on the local market and the investment activity as a whole.

In this orientation, the ideal approach of the direct impact of the multinational corporations on the implantation states and implicitly on the Romanian economy presupposes the comparative analysis of the corporate investments and those specific to the domestic companies, in the sense of the contributions made to the level of the economic and social development. However, the vast majority of countries do not develop separate studies in the field of concrete analysis of how capital expenditure is earmarked and allocated to economic systems. From this point of view, inflows of foreign direct investment constitute a reference element in the study of multinational corporation interdependencies - implant savings, despite the evaluation imperfections resulting from the application of specific procedures. (The reason for the advanced approach is that direct capital investment is a form of financing the expenses incurred by subsidiaries of multinational corporations and, at the same time, an estimated mode used to predict external balance of payments developments, and direct productive investments are nothing more than the expression of the public budget).

Therefore, **the analysis of the direct impact of the multinational corporations on the Romanian economy** involves assimilation of the results of the dual and comparative evaluation of the inflows of foreign investments, together with their contribution to the formation of the industrial capital of the implant branch. Essentially, the importance of addressing the direct impact of foreign capital investment on implant savings, and, on Romania, has multiple valences and at the same time, meaningful meanings on the structuring of industrial and competitive relations in the national economic system, the upward trend of Romania's regional and global integration, being more than obvious.

## 3. ROMANIAN MULTINATIONAL PERSPECTIVE: "HOLDINGS" AND "COMPANIES"

The Romanian competition space is currently based on the construction of an investment regime permissible for multinational operators, materialized in several structural coordinates sufficiently flexible and fully connected to the exigencies of Romania's regional and global integration process, which can be delimited as follows:

- a) the possibility of supporting a **holding structure** or a **group of companies**;
- b) the fluid development of foreign trade relations with a sufficiently competitive transnationalization compared to other investment regions in Central and Eastern Europe, especially under the tariff and the non-tariff regime applied in accordance with the provisions of the Common Market and implicitly of the European Union as a reference in the structuring of its legislative and organizational framework to a full functionality of the internal and external competition mechanism, the latter having as a premise the regulations of the integrated economic spaces which Romania is a partner;
- c) the opportunity to deploy the strategic categories on a global scale by major foreign capital investment operators in the areas of utmost importance to assimilate sustainable economic growth and, at the same time, to ensure compatibility with the structural requirements of specialized industries in developed countries;
- d) streamlining credit and lending systems and policies practiced on a regional and, in particular, European scale by assimilating specific functional mechanisms Multinational Consortia with conglomerate character.

Thus, the aggregation of investment structures in the form of globally managed operational centers [1] has seen in the contemporary period a diversified amplitude manifested in the **Holding Companies** [2]. As a whole, this management approach is applicable to the competitive and institutional framework in Romania, despite the absence of a legislative system regulating the specificity of this form of investment management. However, the differences between the **standardized system of companies**, based on the Companies Act no. 31/1990, and the operational characteristics specific to **Holding companies** are explained by the fact that the latter takes the position of those organizational entities specialized in taking over and managing the portfolios of other enterprises with a similar or different profile, being also separate from the type of investment or placement companies (e.g.: *Mutual Investment Funds / VICs - Sicav, Securities Companies*), through the very object of the competition activity. On the other hand, legislation on the functionality of joint stock companies and Limited Liability allows for the identification of optimal organizational systems for the development of **Holding companies**, particularly in terms of optimizing the tax (-) investment ratio. From this perspective, the analysis of the Romanian accounting system reveals the existence of the group of companies as a typical entity of the organizational configuration associated with “**Holding**” companies, through the “**Class of Accounts 45**” itself related to the “**Group and Associations**” records [3] [4]. In terms of competitive relations, the differences “**Holding (-) Group of Companies**” can be synthesized in a similar way [5] [6]:

- (a) “**Holding**” involves the existence of some partially or fully independent organizational entities under operational control associated with the managerial specificity of a particular entity, in particular a joint stock company;
- (b) **the group of companies** is associated according to the accounting legislation of that organizational structure based on the existence of **subsidiary industrial centers**, characterized by a consolidated decisional system on the analysis of capacity and financial return indicators specific to both a joint stock company and a company with limited liability; while the tax regime for investment entities specializing in participatory operations. Under Romanian accounting legislation, holdings held by a limited liability company or joint stock company are delimited in the range of **10% - 50%** of the total of the securities acquired by another organizational entity, while the takeover of more than **50%** of a company’s portfolio changes its “identity” to a financially and operationally affiliated management center of the investing company [3] [4] [7] successive stages structured as such:

- (b.1.) dividends related to the investment company are paid by the issuing company of the respective securities (the situation of the independent, subsidiary entities) only after the payment of the tax rate for the gross profit realized, in this case **25%**, to which may be added different tax rates specific to the field of activity (the case of the standard tax system) [8] [2];
- (b.2.) the dividends of the investing company are received in the income portfolio only after they have been subject to a taxing rate equivalent to 10% of the amount of the financial resources attributed to the associated company within the distributing company [8] [2];
- (b.3.) Profits of Holding, following the acquisition of various securities portfolios, are treated as "Income from Participations", subject to the taxation regime of any organizational entity [3] [4]; aspects that delimit in fact the functional criteria that can underpin the various ways of managing corporate financial operations.

#### **4. ALTERNATIVES TO THE MACROECONOMIC STRATEGY FOR ATTRACTING DIRECT FOREIGN INVESTMENT. MULTINATIONAL CORPORATIONS VERSUS MACROECONOMIC POLICY IN THE EUROPEAN AND WORLD CONTEXT**

The essence of macroeconomic policies aimed at attracting foreign capital investment lies in the delimitation of those national competitive venues capable of delivering an upward trend in productivity and competitiveness of the economy as a whole but all of which are coordinated through strategic concepts that are sufficiently compatible with emerging processes in regional or even global scale. The situation of Romania viewed in this perspective is therefore quite flexible, supported by the totality of the doctrinal developments up to this moment and also by the strategic complex that has competed with the foundation of the Romanian government platforms and programs, the latter providing the conceptual and applied functionality of the components of the „matrix” of transition to the competitive economy, and at the same time the coordinates of an economic policy generating positive evolutions in the level of the development of the Romanian economy in the sense of connecting the industrial structures and the potential of the absorption markets to the requirements and exigencies of the investment media (Association Agreements with the European Union, CEFTA, NAFTA), [9] [10] [11].

In this orientation, the coordinates of Romania's economic growth policy in the context of the ascendant assimilation of the components of the regional and global integration process of the contemporary economy concern in particular the following categories:

- a) strengthening the tax system**, also in order to be able to ensure the reorientation of resources towards the private sector, more fluid, and at the same time to avoid the accumulation of internal public debt due to the expansion of the tax base in order to reduce its vulnerability to inflation while reducing the fiscal pressure both at the level of the national economy and at the level of the national economy on domestic companies and multinational corporations [12] ;
- b) the permanent flexibility of the price regime and the stimulation of competition**, by adjusting the rules and regulations in the field, to the standards of the European legislative system, in order to ensure a fluid character of the entire process of liberalization of the markets;
- c) the promotion of monetary and foreign exchange policies**, especially aimed at maintaining a relatively stable trend of purchasing power of the national currency at home

and abroad, simultaneously with the advancement of subsidiary policies meant to ensure the firm control of the inflationary process, to coordinate the sizing budget deficit to a reasonable or equilibrium level, and last but not least, lead to consolidation of current account convertibility, favoring full exchange rate liberalization and mechanisms foreign exchange market [13];

- d) **directing financial and credit policy** towards meeting specific objectives, strengthening financial market institutions through the continued development of the infrastructure and, at the same time, by constantly training staff to streamline financial services in Romania and align them to the required standards the process of increasing integration of the world economy;
- e) **the advancement of a multidirectional, even neutral industrial** policy based on the allocation of resources for the development of infrastructure and the introduction of new technologies designed to help eliminate market imperfections and externalities resulting from the lack of information abundance or a coherent information system, the predominance of complicated administrative procedures, etc., along with the promotion of entrepreneurial capacity and the development of small and medium-sized enterprises, as prerequisites for asserting national competitiveness by creating value and added value in the context of some economic areas in the process of globalization;
- f) **regulating and continuing the environmental adaptability of the legal framework of product quality, consumer protection and brand rights** in order to capitalize on Romania's competitive advantages in the already globalized world, to recognize the merits of the elite in all branches of economic life [14]; issues that do nothing but confirm, the set of strategic principles that must be taken into account when implementing any measures that may address the flexibility of national economic subsystems or the functionality of simultaneous and juxtaposed processes of transition and integration.

## 5. CONCLUSION

The emerging assemblage of the absorption markets, managed by the very nature of the competitive mechanisms, manifests in the contemporary period wide variations in terms of the incidence on the direction of the flows of foreign capital investments, in the sense that they are received and maintained in the economies of transit. The case of Romania is by far a particular one, delineated by the emergence of the consumption behavior of the population, and by the very dualistic character of the process of liberalization of the money and capital markets, aspect which has effects of dislocation of the forms under which, as a rule, operating procedures of multinational corporations.

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# FRAMEWORK FOR VALUATION UNDER VARIABLE WACC

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**Abstract:** *The scope of this research is to provide a theoretical framework to the Variable Cost of Capital. Current theory uses Static Capital Structure and Constant Cost of Capital for Firm Valuation. This is being challenged and an improved approach to measure the Firm value on the basis of a Variable Capital Structure and hence Variable Cost of Capital, is being proposed. When a firm changes its Financial Leverage, it is expected that the Components of Cost of Capital will change. Cost of Equity is known to have a linear relation with Financial Leverage). If the level of Debt in Capital Structure varies, the cash flow available to the Debt holders as well as the Equity holders will change. The risk-level borne by the Debt holder as well as the Equity holder will also change. Keeping this in mind, the constancy assumption of the Cost of Debt is being challenged in the paper. The Weighted Average Cost of Capital, useful for discounting firm cash flows, is being estimated as being Variable with time, in the proposed paper. The existing and proposed Valuation Frameworks are being detailed below and the variables in the current literature as well as the proposed concept are tabulated below. This empirical investigation should be conducted with a set of sample firms. The results from the empirical investigation should be divided into Valuation using Static WACC and Valuation using Dynamic WACC. The difference in Value obtained using the two methodologies should be compared for statistical differences. The idea of Dynamic WACC can be extended to the problem of Firm Valuation as well as Project Valuation and Corporate finance practitioners can get a better sense of the risk level of the firm.*

**Keywords:** *Variable WACC, Financial Leverage, Valuation.*

## 1. INTRODUCTION

The varied forms of Capital used to finance organizations creates the motivation for researchers to arrive at various Capital Structure theories, according to Parsons and Titman 2009) [1]. In the existing valuation formulation, Damodaran (2006) [2] uses WACC which is constant and does not change for the future years or for the Terminal Year. Similar formulations can be found in Koller, Goedhart and Wessels (2008) [3] as well as Fernandez (2011) [4]. However, in the proposed valuation framework the WACC is variable and depends on Financial leverage. The main drawback in the assumption of Constant WACC is that it is usually not true. Little research exists on the Dynamic nature of WACC. The traditional view of Capital Structure states that firm Leverage has an impact on the Cost of Debt and Equity, however there is no quantification provided and the practitioner is not able to arrive at, let alone use the Dynamic WACC for project or firm valuation.

### Existing Valuation Formulation (for the $i^{\text{th}}$ firm)

$$V_{i,EXIST} = \sum_{t=1}^T \frac{CF_{i,t}}{(1+WACC_i)^t} + \left( \frac{CF_{i,T+1}}{(1+WACC_i)^T x (WACC_i - g_{iT})} \right) \quad (1)$$

Where  $V_{i,EXIST}$  is the current market value of the  $i^{\text{th}}$  firm,  $CF_{i,t}$  is the cash flow of the  $i^{\text{th}}$  firm in time  $t$ ,  $WACC_i$  is the Static WACC for the  $i^{\text{th}}$  firm across the time intervals.

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## 2. PROBLEM STATEMENT

Capital Structure cannot be constant in time, owing to the variable nature of Financial Leverage with time. In the Indian context, Financial Leverage is sticky with time Jagannathan and Suresh (2017), it is time-variant [5]. Cost of Equity varies with Financial Leverage according to Modigliani and Miller (1958) [6] the Cost of Equity  $r_E$  is a function of the Leverage Ratio (D/E),  $r_0$  is the unlevered cost of equity,  $r_D$  is the cost of borrowings and  $T_C$  is the Corporate Tax Rate.

$$r_E = r_0 + \frac{D}{E}(r_0 - r_D)(1 - T_C) \quad (2)$$

If the Cost of Equity is variable and Financial Leverage while sticky, is not a constant year on year, it is clear that WACC cannot be a constant year on year.

## 3. PROPOSED SOLUTION

There is scant literature on the topic of Dynamic WACC. Contribution of Honková (2012) [7] has provided some insight into how a Dynamic WACC can be modelled, however there is no extension of the model to perform a Corporate Valuation with the obtained Dynamic WACC.

It is therefore being proposed that a Dynamic value of WACC be developed in the context of firm valuation. The Dynamic WACC will need three components for successful implementation. The first is the future Debt to Market Value Ratio as a function of time given by  $(D/V)_t$ . Since Capital Structure is sticky the value can be formulated as:

$$\frac{D}{V}_{i,t} = \alpha_i + \sum_{j=1}^p \beta_{i,t-j} \frac{D}{V}_{i,t-j} + \varepsilon_{i,t} \quad (3)$$

Where  $D/V_{i,t}$  is the Financial Leverage of the  $i^{th}$  firm in time  $t$  and  $p$  is the number of lags in the variable in years. The variable  $\beta_{i,t-j}$  is the coefficient of the lag of the leverage ratio for the  $j^{th}$  lag and the  $i^{th}$  firm.  $\varepsilon_{i,t}$  is the random term which is expected to have mean zero.

Further, it is hypothesized that the Cost of Debt and Equity will vary with firm Leverage as:

$$k_{i,dt} = k_{i,d0} + \phi_i \left( \frac{D}{V} \right)_{i,t} + \varepsilon_{i,t} \quad (4)$$

$$k_{i,et} = k_{i,e0} + \pi_i \left( \frac{D}{V} \right)_{i,t} + \varepsilon_{i,t} \quad (5)$$

Where  $k_{i,dt}$  is the Cost of Debt in time  $t$  for the  $i^{th}$  firm,  $k_{i,et}$  is the Cost of Equity in time  $t$  for the  $i^{th}$  firm,  $k_{i,d0}$  is the Cost of Debt for the  $i^{th}$  firm when there is zero Debt,  $k_{i,e0}$  is the Cost of Equity for the firm when there is zero Debt,  $\phi_i$  and  $\pi_i$  are coefficients related to the Leverage function predicted in Equation (3) above. Therefore, it is possible to predict the Dynamic WACC given in Eq. 6 below.

The Dynamic WACC is proposed as the following:

$$WACC_{i,t} = \left( \frac{D}{V} \right)_{i,t} \cdot k_{i,d} + \left( \frac{E}{V} \right)_{i,t} \cdot k_{i,e} \quad (6)$$

The Proposed Valuation framework is as follows

$$V_{i,PROPOSED} = \sum_{t=1}^T \frac{CF_{i,t}}{(1+WACC_{i,t})^t} + \left( \frac{CF_{i,T+1}}{(1+WACC_{i,T})^T x (WACC_{i,T} - g_{i,T})} \right) \quad (7)$$

**Table 3.1:** Comparison of Existing vs. Proposed Frameworks for Estimation of Variable WACC

S.No	Existing Time-Invariant Variables for the $i^{\text{th}}$ firm	Proposed Time-Variant variables for the $i^{\text{th}}$ firm
1.	$WACC = \left(\frac{D}{V}\right) \cdot (1 - T) \cdot k_d + \left(\frac{E}{V}\right) \cdot k_e =$ Constant (time – Invariant)	$WACC_t = \left(\frac{D}{V}\right)_t \cdot (1 - T) \cdot k_{dt} + \left(\frac{E}{V}\right)_t \cdot k_{et}$ Non-Constant (time – Variant)
2.	$k_d = \text{Constant (time – Invariant)}$ $k_d = \text{Interest\_paid}_{t=0} / \text{Total\_Debt}_{t=0}$	$k_{dt} = k_{d0} (1 + \alpha_1 \left(\frac{D}{V}\right)_t)$ The value of $k_d$ will be calculated for each future time period (year) as a function of $(D/V)_t$
3.	$k_e = \text{Constant (time – Invariant)}$ $k_e = R_f + \beta_i (R_m - R_f)$ Existing literature uses the CAPM and assumes the value at present time and holds it for period of valuation	$k_{et} = k_{e0} (1 + \alpha_2 \left(\frac{D}{V}\right)_t)$ The value of $k_e$ will be calculated for each future time period (year) as a function of $(D/V)_t$
4.	$\frac{D}{V} = \text{Constant (time – Invariant)}$	$\left(\frac{D}{V}\right)_t = \text{Variable}$ as stated in Eq. 3 above
5.	Value is calculated with the help of static WACC using Formula for $V_{\text{EXIST}}$	Value is calculated with the help of Dynamic WACC using the formula for $V_{\text{PROPOSED}}$

### 3.1. Intended Theoretical Contribution

1. Estimation of difference between Value obtained from Static WACC and Market Value call this  $\Delta V_{i, \text{EXIST}}$
2. Estimation of difference between Value Obtained from Dynamic WACC and Market Value call this  $\Delta V_{i, \text{PROPOSED}}$
3. Analysis of whether result obtained from 1 is statistically different from 2 (t-test of difference in means between mean of  $\Delta V_{i, \text{EXIST}}$  and mean of  $\Delta V_{i, \text{PROPOSED}}$ )

**Table 2.2:** Possible Outcomes of the Research

S.No	Research Outcome	Research Implication
1.	No Statistical Difference between $\Delta V_{i, \text{EXIST}}$ and $\Delta V_{i, \text{PROPOSED}}$	No change in Theory, because Static WACC is easier to estimate
2.	Statistical Difference between $\Delta V_{i, \text{EXIST}}$ and $\Delta V_{i, \text{PROPOSED}}$ and $\Delta V_{i, \text{EXIST}}$ is superior	No change in Theory
3.	Statistical Difference between $\Delta V_{i, \text{EXIST}}$ and $\Delta V_{i, \text{PROPOSED}}$ and $\Delta V_{i, \text{PROPOSED}}$ is superior	Change in Theory, and it is better to use Dynamic WACC

**Table 3:** A possible Empirical Approach to Test the theory

S.No	Empirical Approach	Intended Result
1.	Using a Sample of Firms, Fixed-Effect Regression to isolate Coefficients for Eq. 3 above.	The Value of $(D/V)_{i,t}$ is isolated as a function of Dependent Variables in so that the future Leverage Ratio can be estimated.
2.	Using a Sample Firms, Fixed-Effect Regression to Isolate Coefficients for $k_{i,dt}$ given the Eq 4 above.	The value of $k_{i,dt}$ is obtained as a function of $(D/V)_t$ or the Time-Variant $D/V$ . The value of the intercept obtained is the value of $k_{d0}$
3.	Using a Sample of Firms, Fixed-Effect Regression to Isolate Coefficients for $k_{i,et}$ given the Eq 5 above.	The value of $k_{i,et}$ is obtained as a function of $(D/V)_t$ or the Time-Variant $D/V$ . The value of the intercept obtained is the value of $k_{e0}$
4.	Calculations of $V_{i, \text{EXIST}}$ , $V_{i, \text{PROPOSED}}$ and $\Delta V_{i, \text{EXIST}}$ and $\Delta V_{i, \text{PROPOSED}}$ are made on the basis of Static and Dynamic WACC respectively.	The empirical investigation will give Calculated Values of the firm based on the Static and Dynamic WACC
4.	Sample and a t-test for the difference in Sample means between $\Delta V_{i, \text{EXIST}}$ and $\Delta V_{i, \text{PROPOSED}}$ is performed	The results of the t-test will reveal whether there is any difference between $V_{i, \text{EXIST}}$ and $V_{i, \text{PROPOSED}}$

### 3.2. Research Implications

The prediction of D/V Ratio for future periods can help the practitioner determine the risk level of the firm in future years. The risk level is increased if the leverage is increased and this is found in increase of both the Cost of Debt as well as Cost of Equity, when leverage is increased. The linkage between D/V and the Cost of Debt and Equity can be together used to formulate a Dynamic (as opposed to Static) WACC and this could give a better result on the Valuation, as should be considered by practitioners in Corporate Finance.

### 3.3. Research Limitations and Scope for Future Research

The research has focused on obtaining the D/V value for the future and has been able to do so. The assumptions made in the chapter could be construed as limitations. Only five years are proposed into the future for projecting the Cash flows, in most current literature. It could be argued that the firm need not reach the Terminal Cash flow levels in five years. It could also be argued that since Dynamic WACC is being proposed in the calculation, how could the Terminal Value of the Dynamic WACC be a constant? Are lag variables sufficient in estimation of  $(D/V)_t$  or are there other variables that can further improve the accuracy level of the prediction of  $(D/V)_t$ ?

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# INNOVATION OF THE ECONOMY AS A KEY DETERMINANT OF ECONOMIC DEVELOPMENT

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**Abstract:** *The contemporary world is painted with constant changes, in which the key to economic success lies in the ability to understand them and to optimally adapt to the new business environment. Under conditions where changes are gaining more and more intensity, the condition for the development of every economy becomes precisely innovation.*

*Innovation is a significant factor in the development of the economy and society. As a fundamental driver of the growth of the modern economy, innovation is closely related to the development of science and the creation of new knowledge that is being developed, materialized and applied through innovations through the innovation process. The development of the economy is precisely determined by the ability to create, transfer, apply, and commercialize new knowledge through innovation.*

*The subject of this paper is innovative economies that adapt faster and more successfully to changes in a dynamic environment, more effectively solve social challenges, change the economic structure faster and more successfully and create a viable competitive advantage. The aim of this paper is to point out that the improvement of innovation is a key factor in building an economy and a knowledge-based society, whether it's developed or developing countries.*

**Keywords:** *innovation, economic growth and development, strategy, change, knowledge.*

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## 1. INTRODUCTION

Transformation of economies of the world into global economy is becoming increasingly more intensive and it brings a qualitative change in economic relations and global economic trends. The global economic system and the creation of a dynamic and flexible global economic order are the products of intensive process of today's changes.

Events in global economy take place with great speed. Map of the world has changed drastically in economic sense, and global business conditions impose constant challenges for improvement.

One of the main characteristics of modern economic trends is the increasingly greater connection and interdependence. Economic development itself is a complex process in its nature, and explanation of this process cannot rely only on traditional economic factors, but strong effects coming from educational, institutional and technological field must be taken into consideration. Knowledge represents a powerful and increasingly more used base for explanation of collective and individual activity, which contributes to success of development of the economy itself.

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World economy may be observed as a type of pyramid – a hierarchy of knowledge, where those who keep investing in knowledge remain on top. Creation and successful application of new know-how through innovations is a fundamental source of growth of productivity, competitiveness, opening of new work places and economic growth. Without innovative activity, in modern conditions, it is impossible to envision success of economy as a whole. Considering the relevance that innovation has for economic development, each country tries to perfect its business environment to the greatest extent possible, so as to enable it to become favourable for continuous development of innovations. Observing of innovative results is of great relevance, because these results represent a base for defining the developmental policy of each country, and they are an important base for its implementation. [1]

## **2. MODERN TENDENCIES IN ECONOMY**

The modern world is painted by constant changes, where the key to economic success lies in the ability to understand them and in the optimal adjustment to the newly established business environment. These changes have significantly changed the image of the modern world, region, state and enterprise. Changes that take place are not tied to any specific place on the planet, but they do affect each place individually. [2]

The world has gone through many economic paradigms and it is already faced with common responsibility and necessity to harmonize its economic development with the needs of people and of the nature.

The essence and purpose of economic development of the society is reflected in the continuous improvement of various subsystems of the society – economy, politics, culture, etc. One of the key requirements for economic development, and for growth of social well-being, is the development and improvement of production structures, with participation of high-tech branches, science and education in the capacity of key growth factors [3]. This achieves a synthesis of structural, technical and technological and institutional changes, which leads to increase of economic success and competitiveness. The process of adoption and implementation of the most advanced industrial technologies, economic forms, and their corresponding social and political institutions, have a decisive influence on the achievement of goals and priorities of economic growth and development.

The matter of development of the economy today has greatly evolved and it overcame theoretical considerations that applied before. Economic, social, technical and technological changes are focused on the launching of economic growth and on sustainability of development, in order to overcome economic backwardness. The process of transformation of the manner of behaviour of economic subjects is focused towards qualitative progressive changes of existing institutional forms, technological improvement of economic system and strengthening of its competitiveness.

Thanks to application of modern technologies, an impulse for change of tradition and social values is being created. [4] Former development, which is based on natural limitations in achievement of high growth rates over a long period of time, is being shaped into the developmental concept that applies today. This concept is based on a new growth theory which focuses on applied knowledge and complex of scientific and technological development. Former understanding of wealth was measured with physical and financial capital, but today, a key determinant of national wealth is the ability to develop new knowledge, ideas, innovations and technologies, i.e. to create human capital and disposing of it. (National Strategy for Sustainable Development)

These new waves change the society, not only in the sphere we refer to as economy, but far beyond it. Development of IT and communication technologies, manufacture and use of new materials, has created unimagined possibilities for networking and connecting of commodity, and particularly financial flows, which were unimaginable until recently. Instead of natural resources, fertile soil, mineral resources and available capital, the applied knowledge, education and science have become dominant factors for development of modern economy in almost entire world.

### 3. THE POWER OF THE ECONOMY OF KNOWLEDGE

We are witnessing the fact that the time we live in is characterized by continuous and dynamic changes. However, each change doesn't produce a positive effect, which is especially inherent to changes in modern conditions, which are mainly devastating, destructive, negative, and often undesirable. Positive changes based on the process of application of new ideas in order to achieve better results, whether within a company or on the level of economy as a whole, have a direct impact on economic development of the entire society.

In parallel with the acceleration of development in the world, a global environment is created. In an economy characterized by globalization, fast technological changes, changes in consumers' preferences, dominance of knowledge and need for quality information, entire regions are connected in order to acquire the strongest position possible on the global economic and financial stage. Those who don't take part in these processes will quite certainly remain marginalized on the long run, excluded from main flows of information and knowledge, and as the time passes it is increasingly more difficult to compensate for the missed opportunities.

In conditions when the changes are becoming more intense, the key factor for competitiveness of every economy is precisely innovation. The real economic drivers are new knowledge and new achievements, i.e. when new knowledge finds its way to the market. Economy guided by innovation will gain a competitive position on the global market through constant innovations. Introduction and diffusion of an innovation is conducted with the goal to create economic value.

Knowledge represents the most important factor for development of economy. Today, "knowledge-based economy", i.e. "economy of knowledge" has become recognizable and very popular. We might say that there are hardly any economically developed countries of the world without a separate policy or strategy for inciting knowledge-based economy. (National Strategy for Sustainable Development)

Modern economy depends increasingly more on knowledge, information and specific skills, which affects the increase in a share of knowledge-based high-tech production. In such conditions, success depends on organizational, economic, social and other knowhow. The innovation process starts with the discovery of knowledge about the fact that there are gaps in knowledge which can be used as a new, potential market need. Activities based on new knowledge stimulate the appearance of new types of innovation and allow the innovation process to adjust itself to requirements for development of a society based on knowledge.

Economic policy that is supposed to incite the climate of innovations through certain measures has great influence on development. Each economy has its characteristics, which determine innovative abilities to a greater or smaller extent. [5] Certain macroeconomic performances of



a country explain the difference in the quality of certain components of the innovative capacity of the economy.

Each country tries to improve its business environment to the greatest extent possible, to make it favourable for continuous development. This is not a big problem for developed countries in comparison to underdeveloped countries that don't have sufficiently developed scientific and technological capacity that would incite the creation of necessary knowledge about innovations.

It is more difficult to keep up with more advanced market economies today than it was in the past. Success on the long run requires thinking on the long run – a vision. A country's task is to continuously search for actions necessary to launch and maintain the momentum of the economy.

For a more successful functioning of the economy, which would achieve a more dynamic economic growth and sustainability of development, it is necessary to create economic system and economic policy that will allow for achievement of priority goals in a satisfactory manner.

#### **4. INNOVATIONS AS FUTURE CONCEPT OF ECONOMIC DEVELOPMENT**

Innovations represent the key driver of economic growth. Fast technological changes in previous years created great opportunities, as well as challenges. Innovation comes in different sizes and shapes. From time to time, great waves of innovation fall upon the society and thus create discontinuity and penetration in the development of knowledge.

Innovations are an important factor for the increase of each country's competitiveness. Sadly, in some countries, the innovative climate has not yet been accepted, which represents a great challenge for these countries when it comes to innovation. There isn't a business environment that would incite the development of innovations in the appropriate manner. It is necessary to create a business environment where intellectual property would allow the innovators to draw economic value from their work and increase economic success and competitiveness.

Low allocations for science, insufficient cooperation between science and economy in terms of commercialization of research and innovative projects, lack of institutional framework for support to innovations, uncertainty of financing of scientific and research organizations, lack of researchers, i.e. "brain drain", are merely some of the factors that significantly hinder the innovative ability in many countries, among which we should mention Serbia, as well as other countries in its region.

From the aspect of innovations, a lot needs to be done in less developed economies on improvement of internal structures of knowledge, technology and other material and non-material assets, i.e. on improvement of own innovative capacity. Only after an appropriate knowledge base is established and after innovative possibilities are observed, we can work intensively on the connecting with external sources of knowledge and technologies and to create new values through productive and effective combination of internal and external sources and thus improve the national investment culture. [6]

In comparison to developed countries in the world, the innovation potential of Serbia, and of countries in the region, is in a far worse position. Such position, among other, stems from the fact that there is no adequate access to sources of financing, investments in research and development

of new products and services, and market development. The rate of investments in research and development, and in education, is very low, and insufficient for the needs of the country.

Compared to developed European countries, the innovation potential in Serbia's private sector is in a worse position in terms of access to market, sources of financing and investments in research and development of new products. It is estimated that total investments in science in Serbia don't go over 0.5% of GDP, according to which Serbia is still classified among the countries with the lowest investments in science, both in the developed world and in the region. A very low share of research and development costs in GDP in Serbia testifies this (Ristić et al. 2016, p.23). National system of innovations is a network of public and private institutions whose activities and interactions determine the creation, import, continuous improvement and the widest diffusion of new technologies. [7]

According to the Global Innovation Index 2018 Report, Switzerland is at the top of the table of most innovative economies that were selected based on availability of information about certain determinants that are relevant for innovation of the economy. EU countries are also leading countries when it comes to innovation index.

**Table 1:** Top 10 most innovative economies in the world in 2018, according to WIPO [8]

Country	Value of Global Innovation Index	Position
Switzerland	68.4	1
The Netherlands	63.32	2
Sweden	63.08	3
Great Britain	60.13	4
Singapore	59.83	5
USA	59.81	6
Finland	59.63	7
Denmark	58.39	8
Germany	58.03	9
Ireland	57.19	10

Serbian economy, as well as the economies of other countries in the region, has a low level of innovation, which can be seen in Table 2. Serbia cannot boast with its position on the innovation list. It is ranked 55<sup>th</sup>. We may conclude that according to innovation performances, Serbia is significantly lagging behind compared to average and most countries of Europe.

**Table 2:** Global Innovation Index for countries of the region, 2018, according to WIPO [9]

Country	Value of Global Innovation Index	Position
Croatia	40.73	41
Montenegro	36.49	52
Serbia	35.46	55
Bosnia Herzegovina	31.09	77

The fundamental problem that impedes the development of innovation in these countries is that the excellence of scientific research and their relevance for economic and social development of the country and society in whole are not sufficiently supported by the research financing system. The system for management of scientific and innovation system is not sufficiently effective, and coordination of work of relevant institutions and various stakeholders is very weak. What is characteristic for Serbia, as well as other countries in the region, is the lack of appropriate

human resources in scientific and research organizations, economy, public sector, and the lack of long-term measures for resolving the given issue.

One of the conditions necessary for development of innovative potential is the creation of a business environment that would be favourable for encouraging an innovative climate, i.e. business environment that would enable economic success and increase these countries' competitiveness in the world. [10]

## 5. CONCLUSION

Business operations in modern conditions require an innovative manner of thinking, acting, doing business and functioning. Innovation is the main driver and carrier of development of modern economy. Since everything today is observed on a global level, innovation is also observed globally. Innovation in the entire process of economic activities is getting a key role. This role is seen in the specific meaning and power given to innovation and its real representation of the possibilities that a country has at its disposal.

The most important task for every economy that wants to move forward is how to achieve economic growth and development. This requires constant improvement, innovation and achievement of significant results. Economic development achieved through application of innovations becomes a factor that has a strong influence on a country's power.

Development of innovations is the safest way to increase productivity and resolve problems with development. Innovative economies adapt to changes faster and more successful in a dynamic environment, often dictating the direction, scope and dynamics of changes. At the same time, economies with a low level of innovative development are left behind, because innovation is one of the main pillars for development of the economy.

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# FOREIGN INVESTORS – FRIENDS OR ENEMIES OF DOMESTIC ENTREPRENEURS?

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**Abstract:** *Besides the well-known factors that affect entrepreneurship: economic and technological development, culture and education, FDI should also be considered as an important factor for entrepreneurial development of a host country. Having that in mind, the aim of this paper is to analyze how FDI may affect the host country's entrepreneurial activity, through a literature review. In some of the analyzed papers foreign investors are seen as friends of the host country's entrepreneurship thanks to the capital inflows, know-how, managerial capacity and employment growth, but in some other papers are seen as enemies, owing to increasing import competition and discouraging domestic entrepreneurs. The main contribution of this paper is compressing into a single material an overview of the friendly and unfriendly based effects of FDI on the host country's entrepreneurship.*

**Keywords:** *Foreign direct investments, entrepreneurship, employment.*

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## 1. INTRODUCTION

Foreign direct investments (FDI) play an important role in a host country's economic development. FDI are very important especially for developing countries, because they contribute to economic growth and the growth of investment activities in the host country. The development that meets our own needs without compromising the ability of future generations to meet their own needs should be the main goal of any economy, especially the emerging ones. In international business research, assumption suggests that there is a positive relationship between FDI and the host country's entrepreneurship. But, if foreign investors want to find their place on the host country's market and be successful on it, it's very important to choose the right international market entry strategy (IMES). With a brief overview of the internationalization strategies and entrepreneurship, in this paper, emphasis is put on the two of IMES, which have the great importance for the domestic entrepreneurship –cross-border mergers and acquisitions (M&A). Having that in mind, the aim of this paper is to analyze how FDI through IMES, especially M&A, may affect the host country's entrepreneurship, through a literature review.

## 2. POSITIVE AND NEGATIVE EFFECTS ON DOMESTIC ENTREPRENEURSHIP – A LITERATURE REVIEW

A large number of scholars have been engaged in examining the impact of FDI on the host country's entrepreneurship. A large number of studies have shown the existence of positive as well as negative relation between FDI and domestic entrepreneurship, and the importance of IMES for the domestic entrepreneurship examination.

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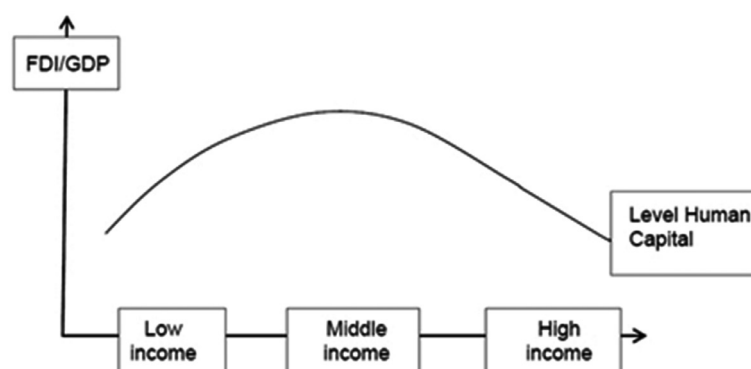
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Foreign investors bring knowledge and modern technology that can spillover into the local economy, but they are also the source of increased competition in product and factor markets and may raise the opportunity cost of entrepreneurship compared to employment. The direction of the response of domestic entrepreneurship to FDI inflow relies on whichever of these two effects dominates. M&A FDI inflows are negatively associated with domestic entrepreneurial activity, since there are negative FDI spillovers, especially through stronger competition and local wage structure, as well as entrepreneurial entry since there is negative horizontal spillover effect on domestic entrepreneurship in some industry clusters [1].

FDI have an important impact on the economic growth of the host country, especially their two types - vertical and horizontal FDI, which have a different impact on the accumulation of human capital and education. Vertical FDI are focused on increasing the efficiency of business and for such investors, countries with cheap workforce are attractive. These investors, in order to achieve the highest efficiency [2], offer low wages to workers, and the final result is demotivation of the host country's population for further training and education. On the other hand, horizontal FDI are market-oriented and such investors aim to support the market development of the host country, they are ready to offer higher salaries to the workers in exchange for their high expertise, resulting in a motivation of the population to improve through higher levels of education [3].

Entrepreneurship is an important determinant of FDI and countries, especially the emerging ones, should promote and encourage entrepreneurship, in order to attract FDI inflows. The success of entrepreneurs attracts resources such as venture capital and specialized labor. There is a need for sufficient human capital and high education level in host country [4]. Zhang-Markusen (ZM) theory starts from the assumption that there is an inverse (concave) connection between FDI and human capital, and the countries are grouped into income categories (low, middle and high level of income) [5]. Because of this, countries with low wages and human capital can't attract FDI. According to the ZM theory, the availability of skilled labor in the host country represents a foreign investor's direct request [6]. This means that foreign investor won't invest, even if the wages of unskilled labor in the host country are very low, if there is insufficient amount of human capital. Figure 1 shows the inverse U-shape relationship between SDI and human capital.



**Figure 1:** Inverse U-shape relationship between FDI and human capital [7]

Foreign investor will invest when a host country can offer a certain level of qualified workforce. Foreign investors are becoming more and more aware of the importance of skills, knowledge and expertise for their production. That's why they are looking for a workforce that has knowledge in the fields of engineering, information technology, organizational skills and business ad-



ministration. FDI level was significantly higher in countries with higher education levels. This U-bond is stronger in the case of middle-income countries and weaker in low and high-income countries, as low-income countries are less competitive in the FDI market due to low wages and unskilled labor [7].

Regarding to FDI and domestic entrepreneurship, it's crucial to take the education level into account, since this determines the relationship between FDI and entrepreneurship is positive or negative and how strong that relationship is. In highly educated countries with increasing FDI levels, domestic entrepreneurs should take into account that they may expect serious competition from foreign investor firms to hire qualified employees. There is a positive spillover effects of inward FDI on entrepreneurship, but a strong negative association between education and entrepreneurship, suggesting that in countries with higher educated populations the number of entrepreneurs is lower but average firm size is higher [8].

Entrepreneurship as the creation of new ventures acts as a spillover mechanism through which the knowledge not exploited by essential organisations can be transferred to the market. Export-oriented entrepreneurship is a specific type of opportunity driven entrepreneurship that positively affects economic growth. The additional economic impact of any firm involved in export activity may occur because exporting is associated with learning processes that lead to improved productivity at the firm level [9].

The effect of FDI may be analyzed through a specific entry mode, on the host country's economic development. The impact of FDI on host country's economic growth and entrepreneurial activity differs by the country of origin of FDI and also differs depending on host country characteristics related to the "absorptive capacity" of a host country (the ability to reap the potential benefits of FDI), and host country characteristics, including the quality of institutions, the extent of trade openness and the stock of human capital [10].

The impact of FDI on entrepreneurial activity, with a focus on gender differences, is very important question for host country's economy. Research on this issue is significant, because it's still not clear in scientific literature whether FDI have an impact on domestic entrepreneurship, and is that effect positive or negative. The scientific research has shown that the impact of foreign direct investment on entrepreneurship is positive when spillovers into the host country are positive (in the form of new technologies, knowledge, etc.), and negative when foreign investors push local entrepreneurs from the market, who are discouraged and motivated to search for new opportunities on foreign markets. The impact of FDI on host country's entrepreneurship will vary depending on gender. The effect will be positive for male entrepreneurship, but negative for female entrepreneurship. Also, the higher level of taxes, primarily the taxation of enterprises, has a negative impact on entrepreneurship [11].

### **3. FDI AND FIRM CREATION – CONCEPT FRAMEWORK**

Countries accept FDI as a source of capital and innovation, with aims of promotion competition and economic efficiency. Companies spread national borders worldwide in search of new markets and creative partnerships. Consumers are offered better quality, wider choices and lower prices of goods and services which they buy. FDI are targeted at those fast-growing sectors, serving as a successful example in the local economy and through large-scale training programs, have a role in reducing the restraining limits necessary changes. Competition on com-



modities markets and production factors can reduce profits local firms, but the associated effects on industries that TNK suppliers can affect the reduction in input costs and increase profits. Local industrial sectors can grow up to the limits when local production takes over and expels enterprises established FDI funds.

Scientific results show that FDI significantly crowds-in new domestic firms when business start-up regulations are lower. The connection between FDI and entrepreneurial activity of new host country's firms significantly depends on the existing regulatory environment for business start-ups. FDI significantly crowds-in new host country's firms when business start-up regulations are lower, and excessive start-up regulations usually are inefficient, thus dissuade new firm creation by increasing the costs of doing business and impeding the crowding-in effect of FDI in domestic product and labor markets, as well as in foreign markets. From a policy standpoint, reforms to establish the level of regulation that is most beneficial for the successful entry of new local firms can therefore play a critical role in enhancing the complementarity between foreign and domestic enterprises [12].

Taking into consideration industrial and geographical linkages of FDI spillovers in addition to competition effects of FDI [13]:

1. FDI spillovers are related to the labor market pooling, input sharing, and knowledge spillovers between industries;
2. Geographical linkages of FDI spillovers refer to localization theory of knowledge spillovers, which indicate that a successful commercialization process of new and entrepreneurial ideas possesses highly localized characteristics in geographical proximity;
3. Competition effects of FDI indicate an entry barrier for indigenous entrepreneurs to launch new businesses due to increased market competition caused by the presence of FDI firms in the host market.

Foreign ownership can help in restructure and enhance the productivity of host country's firms. The scientific research has shown that FDI has positive influence in reinforcing the creation of new firms, and, in line with the established literature, a foreign investment is likely to influence the job seeker to get employed rather to start their own business [14]. The results confirmed that the impact of foreign investment is, in general, positive and tends to influence the restructuring process of domestic enterprises.

Results showed that the inwards FDI positively influence the opportunity-driven entrepreneurs while the outwards FDI have a positive influence on the necessity-driven entrepreneurs. There is also a negative impact on the other category of entrepreneurs. FDI impact on the opportunity-driven entrepreneurs are strongly robust and opportunity entrepreneurship is associated with developed, innovation-driven economies, while the necessity entrepreneurship is important for the European efficiency-driven economies [15].

#### 4. SUMMARY

FDI are an essential element of the host country's economic development and entrepreneurship. This paper presented a literature review on the influence of FDI on the host country's entrepreneurial activity, seeking to characterize the state of art on the theme, the reasons for using a certain investment strategy of internationalization by foreign investors, the friend or foe effects of FDI on the host country's entrepreneurship, sustainability, education and labor market.

According to practice and academic content, FDI have both positive and negative effects on the host country's entrepreneurial activity.

The final effect also depends on IMES choice. In line with the majority of theoretical scientific papers that speak of the positive impact of greenfield investments, comparing to M&As whose positive impact varies and can often be also negative, the country's economic policy makers should encourage FDI that are realized in the form greenfield investment, as they significantly contribute to the growth of productivity of the firms, the creation of new jobs and thus the reduction of unemployment, and are responsible for the economic growth of the country. This is especially important for underdeveloped and developing countries, as there is occasionally a negative correlation between cross-border M&As and economic growth of the country.

The presented literature review of the FDI's impact on the host country's entrepreneurial activity shows that FDI have a lot of friendly impacts on the economic, entrepreneurial and social components of the host country's economy, but also that effects can be negative or unfriendly.

The proposal for future researches is to analyze both positive and negative effects of FDI on host country's entrepreneurship, especially through the IMES choice.

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# ANALYSIS OF THE TOURISTS SATISFACTION IN RELATION TO THE COUNTRY THEY COME FROM WITHIN THE V4

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**Abstract:** *The aim of this study is to identify the relations considering from which countries the visitors are and how satisfy they are. During our survey we found out there are four major nationalities that have visited Slovak destinations – Slovaks, Czechs, Hungarians and inhabitants of Poland, as well as we call this group of states V4 (Visegrad Group). By using linear regression, we reveal if there is a relation between satisfaction and nationality of tourists in chosen destinations, national parks – Pieniny, Slovak Paradise and well known High Tatras – and how the findings differ.*

*The respondents' satisfaction was determined by a questionnaire survey asked in destinations, where it was necessary to evaluate the various attributes with which the visitor meets during the holiday or trip. Attributes included services, potential and development of destination, as well as insight into various other factors visible in the national park. Overall, we identified 16 attributes and evaluated in the R program. The results are tables with numerical representations of the effect of the variables.*

**Keywords:** *satisfaction in tourism, Slovak tourist destinations, linear regression.*

## 1. INTRODUCTION

Spiš, as a region in Slovakia, is often called the pearl of Slovakia, not only typical of its dialect and cultural habits, but also known in terms of natural heritage. Tourism is very widespread and important for many entrepreneurs. Other authors [1] also describe that tourism in general is recognized as one of the key development sectors in all countries, and also represents a major source of income, jobs and wealth creation. It plays a vital role in promoting the image and perception of the country at international level, and also affects domestic policy. This scale of impact and importance creates challenges to measure tourism competitiveness.

Based on statistics from previous years, we can see some increase in the number of tourists visiting Slovakia as a destination for trips or holidays. The number of visitors in accommodation facilities is shown in Table 1 below - growth is visible except in 2014 (probably due to adverse weather and currency developments) - by more than 25% of visitors used accommodation facilities in 2018 compared to 2013. If to mention the countries that visit Slovakia, there is the Czech Republic, which covers almost a third of all foreign visits. It is also important to mention other active tourists from Poland, Germany, Hungary and many others from Europe and around the world, also significantly from Asia [2].

Anyway, traveling has changed compared to the past and is more considered as a trend or lifestyle. Many people go on holiday more than once a year and a common trip abroad is no longer exceptional. Trips and vacations become a more productive experience, destination information is very easy to access on the internet, and travel blogging is a popular topic from the social media perspective. A variety of bloggers are showing how to travel cleverly and cheaply, and even a weekend

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outside the country may not be the privilege of the rich. People find the feelings of satisfaction and fulfillment of needs that are currently different from the previous generation. We can also see an increase in the number of domestic guests in accommodation facilities in Slovakia, which represents an even higher proportion of visitors than foreign ones. According to [3], visitors prefer rather shorter holidays and longer weekends than long-term summer holidays. The authors describe that the change in visitor behavior is noticeably observed, their mobility is higher, when they look for adventures and experiences and more various destinations may be visited during one vacation.

**Table 1:** Number of visitors in Slovak accommodations in years 2013 – 2018.

<i>Years</i>	<i>Total visitors</i>	<i>Foreigners out of it</i>
2018	5 596 407	2 256 027
2017	5 375 475	2 162 384
2016	5 023 629	2 027 009
2015	4 330 249	1 721 193
2014	3 727 710	1 475 017
2013	4 048 505	1 669 948

## 2. MATERIAL AND METHODS

We want to evaluate the image of three selected destinations in Slovakia - the well-known High Tatras National Park, the Slovak Paradise National Park and the Pieniny National Park, which is shared with the neighboring country - Poland. In the above-mentioned destinations, the survey and the data collecting were carried out, preferably in a personal form. The survey consisted of a questionnaire where the main part was to decide how satisfied the respondent is with the different attributes in the destination by using Likert Scale from 1 to 5 (from very dissatisfied to very satisfied).

We consider respondents from all three tourist destinations as our research sample; they were classified demographically from which country they come from. The respondents were specific visitors who visited the destination, were able to objectively express their satisfaction with the various attributes during a trip or holiday. Together we received answers from 331 respondents, who were primarily from our country, the Czech Republic, Poland and Hungary, but people from other 6 different countries also participated to a lesser extent in the research. However, we take into consideration 314 responses which were from participants from V4 countries. The most questionnaires were collected in the High Tatras. Following we present specific numbers of respondents:

- 99 respondents in Pieniny National Park,
- 98 respondents in the Slovak Paradise National Park,
- 117 respondents in the High Tatras National Park.

## 3. SURVEY ANALYSIS AND LINEAR REGRESSION RESULTS

We compiled data file in Excel consisting of survey data obtained. Then we created own value called “Sat” (as a “satisfaction”) for each response, which means overall average satisfaction value from all the respondent’s answers of the attributes. Respondent was instructed to not rate irrelevant attributes (e.g. accommodation facilities if was not accommodated).

Then we could use our data file in R program to obtain data for further interpretations of our desired regression. From this command we wanted to learn what is the satisfaction of the Slovaks

visited High Tatras destination, in comparison with other respondents from the V4 countries and also in comparing two other destinations - Slovak Paradise and Pieniny.

**Table 2:** Regression statistics of all satisfaction attributes towards High Tatras and respondents from Slovak republic

	<i>Estimate</i>	<i>P - value</i>
Intercept	3.83720	< 2e-16
Pieniny <sup>1</sup>	-0.04602	0.60614
Slovak Paradise	-0.36715	5.01e-05
CR	0.20181	0.03473
PL	0.23230	0.00755
HU	0.12732	0.28581

It follows from the data in Table 2 that respondents from Slovakia were satisfied in the High Tatras at the level of 3.83720 points (in satisfaction assessment from 1 - very dissatisfied to 5 - very satisfied). The p-value is very low, almost equal to 0. We can consider this P-value reliability test condition to be significant and valid. In doing so, the p-value is conventionally recognized at a rate of 5%, (or value 0.05), that is the smallest level of significance at which we reject the set null hypothesis.

For the Pieniny destination, we obtained the estimated value of the linear regression test of -0.04602, which we can say that the respondents were slightly less satisfied than in the High Tatras, but the informative value of this figure is relatively low according to p-value of 0.60614, which is significantly higher than 0.05.

Respondents in the Slovak Paradise were -0.36715 points less satisfied than in the High Tatras and we rate this figure as reliable according to the p-value test. The reasons why the perception of the Tatra destination is more positive may be several and seem more understandable. The Tatras are our highest mountains in the country, and many foreign tourists come to Slovakia just because of their visit, but many of the locals used to spend their holidays here as well. When it comes to the fact that it is the most well-known national park with high traffic, then we see a better infrastructure, a greater variety of services, or a more massive awareness of known places in the media, as well as directly in the destination.

An important difference between parks is, for example, accessibility. All the trains and buses from east to west along this route arrive to Poprad, the main starting point of the Tatras. From Poprad it is easy to transfer by bus, electric railway or passenger train to even closer areas of the region and get directly to the important centers. Compared to the Slovak Paradise, accessibility is also much disadvantaged because of its location, but also due to insufficient transport connections. According to routine schedules, getting to resorts like Čingov, Podlesok or Spišské Tomášovce is quite complicated (sometimes impossible), compared to a more famous destination.

Poles (0.23230 points with a valid p-value test), as well as Czechs (0.20181), are more satisfied to local visitors - Slovaks. We consider this phenomenon to be that sometimes it is natural for home visitors to see much more deficiencies than strangers. For foreigners coming to a destination with some expectations, it is more likely that their motivation to get to know the site is higher than assessing the current status of the site.

According to a study by Malaysian authors [4], the tourist behavior is affected by internal and external factors. These tourists choose to go on vacation because they want to fulfill their inner



desires and also their decisions where to go are based on the different attributes of the destination. We can add that the citizens themselves may look differently to the domestic and foreign destinations in some respect, and some local respondents who came to the national park for the purpose of hiking in the mountains participated in the survey too. The destination is usually also well known for those respondents, its evaluation may be more skeptical and therefore they could influence the results of this analysis that they might were less satisfied than foreign visitors.

To expand the analysis, we decided to select 5 types of services in destinations, namely: **accommodation services; catering services; transport options; shopping opportunities; cultural - entertaining opportunities** - of which we obtained the average satisfaction values of the respondents, and by the very similar coding in the R program we obtained the following data recorded in Table 3.

**Table 3:** Regression statistics of selected satisfaction attributes towards High Tatras and respondents from Slovak republic

	<i>Estimate</i>	<i>P - value</i>
Intercept	3.75933	< 2e-16
Pieniny <sup>l</sup>	-0.23570	0.029051
Slovak Paradise	-0.64827	4.83e-09
CR	0.21657	0.060925
PL	0.38412	0.000265
HU	0.08161	0.569940

The biggest difference can be seen in the Slovak Paradise National Park, which is more than half point lower than in the High Tatras National Park, which means that overall satisfaction in the defined 5 types of services is significantly worse compared to the leading destination and then 0.24 points in the rating satisfaction of the Pieniny National Park is rated worse too.

Other valid result worthy of mention is the increased positive satisfaction of Poles in the destination. We register they feel satisfied more than 0.38 point than Slovaks with the selected services.

As already mentioned in the previous interpretations, the High Tatras are clearly better equipped with services, whether they are many options of transport or other as well as wide offer of accommodations and food possibilities.

If we evaluate cultural and entertainment opportunities, it is evident and measurable how many events are organized in the center. After a random search we register several events in all the resorts, but for example in the surroundings of Pieniny there are many in Stará Ľubovňa in the castle or in the spa. Stará Ľubovňa is 28 km from the Pieniny's important center Červený Kláštor and geographically it is not located in the national park. For comparison, many events in the High Tatras are organized more concentrated near the towns of Štrbské Pleso, Tatranská Polianka, Starý Smokovec, Hrebienok, which can be considered as events directly in the destination. Then in the resorts of Slovak Paradise - Podlesok and Hrabušice, 7 major events were organized in year 2018 from May to September, of which 2 were more related to the National Park – Opening of the Infopoint at the kayaking and canoeing starting point in Hrabušické Mýto and kindergarten program called Protecting the Environment with offered horse riding for children.

#### 4. CONCLUSION

By summarizing our study, we can claim there is significant progress in providing services in the High Tatras region compared to the other destinations of Slovak Paradise and Pieniny. This fact was proved by the described linear regression test, where the satisfaction of respondents from the V4 countries in individual destinations was examined. At the same time, we have proven by research that foreign visitors are more satisfied than Slovaks. If we specify, the highest level of satisfaction is reported by Poles and then by tourists from the Czech Republic. This conclusion may be due to the fact that perhaps the nature of the people themselves, or perhaps the Polish people, plays a certain role. We used open questions in the survey too, we received many subjective evaluations and comparisons with Poland - the country where the Dunajec river is a border and countries are connected with a bridge, but the services on the Polish side are incomparably better. Paradoxically we may say that it is Poles who are more satisfied than we ourselves are.

We recommend to start comprehensive development strategy mainly for national park Slovak Paradise focused on services and to optimize environment for tourists who come to the destination, those want to stay overnight, raise accommodation and food services as well. Pieniny national park works better with their services, but needs to communicate with region municipality regarding transport services. Both parks may grow by organizing events at site, many people even don't know these parks are localized up to 40 km from High Tatras and offer other experiences which can be compared with High Tatras destination from nature side. Tourists may get new sight to these beautiful places, which own such potential that just needs to be developed and promoted internationally.

#### ACKNOWLEDGEMENTS

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# SUSTAINABLE TOURISM ON THE POLE OF COLD

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**Abstract:** *Today two geographical points in Yakutia consider themselves the Poles of cold: Oymyakon and Verkhoyansk. The policy of promoting Oymyakon and Verkhoyansk as tourist sites associated with the Poles of cold is varied according to the specific socio-economic and cultural conditions. If Oymyakon is more promoted as the Pole of cold on the scale of international and regional tourism thanks to its infrastructure, Verkhoyansk keeps the reputation of the sacred place for the local population, but also of the place for scientific tourism and research. The cross-sector partnerships can be seen as powerful mechanisms for building constructive relationships between tourist companies and local communities and contributing to sustainable community development. The engagement of indigenous communities and their participation in all stages of the tourism development (concept, promotion and realisation of tourist products) contribute to achieve a more sustainable development of tourism in situ. In order to study the history and different aspects of polar belonging we analyzed a large number of scientific texts, literary, historical documents, legends, folklore, stories and blogs of travelers and tourists, but also the mapped and local toponyms, interview and questionnaires.*

**Keywords:** *Russian Arctic, pole of cold, indigenous communities, promotion of extreme tourism, social responsibility, environmental and human impact.*

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## 1. INTRODUCTION

Nowadays the interest in the Arctic- and North-related topics attracts the attention of many politicians, scholars, researchers, entrepreneurs, and tourists. The Arctic regions of the Russian Federation, the territories of which have an open access to the Northern sea route, are the shorelands of the Arctic Ocean in Yakutia. The Sakha Republic (Yakutia) is one of the largest industrial and national regions of the Russian Far East; its territory is 6 times larger than that of France and 14 times larger than the territory of Great Britain. There are two locations in the Sakha Republic (Yakutia) which can have a high probability of being recognized as an integral part of the Pole of Cold, namely – Verkhoyansk and Oymyakon. The coldest territories are considered to be the ones located near Verkhoyansk and Oymyakon, where the temperatures can decrease down to – 70 °C. The summer (short-term) temperature can reach an average of +30 °C. Such extreme annual temperature fluctuations (100 degrees) can only be observed in Yakutia. Today, winter tourism in Yakutia is a very attractive form of tourism worldwide. Both poles, especially Oymyakon, owing to its infrastructure, attracts tourists with its uniqueness; hundreds of tourists come to Yakutia from different parts of the world to get a first-hand experience of the extreme cold and severe climate, which represent a special kind of extreme activity.

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## 2. GEOGRAPHIC LOCATION OF THE POLES OF COLD

Verkhoyansk is a town in the Verkhoyansky administrative district of the Sakha Republic (Yakutia), situated on the right bank of the Lena River and 92 km south-west from the administrative center of this district – the town of Bataguy, the northernmost town of Yakutia. Verkhoyansk is officially registered as the Pole of Cold of the Northern hemisphere. It is one of the northernmost towns located in the circumpolar region and the smallest populated towns of Russia (ranking 3<sup>rd</sup> from the bottom of the list): only 1,150 reside there. The only way to get there is to, first, travel by plane from Moscow to Yakutsk, then take another local airline plane and fly over the Lena River and the Verkhoyansky range, thus, reaching Bataguy (the administrative center of the Verkhoyansky district), and, finally, drive down a dirt road to Verkhoyansk. There is no airport in Verkhoyansk, it does not operate, to be more precise; it was closed after the fall of the USSR.

Initially, Verkhoyansk was established as a Russian Cossacks settlement, later it became a place for political exiles. On January 15, 1885, one of these exiles, S.F. Kovalik, registered and entered this registry in the meteorological station journal the lowest air temperature of -67.1 °C. In 1892, an even lower temperature was registered, amounting to -67.8 °C. In 2005, the local administration of the town set up a memorial stand to commemorate the lowest registered temperature in the Northern hemisphere. The region has a sub-Arctic and sharp-continental climate. The average temperature in January ranges from -38 °C to -48 °C, and from +15 °C to +17 °C in July. The average rainfall level amounts to an annual range of 150 mm to 300 mm.

Verkhoyansk was founded in 1638 by Posnik Ivanov and was intended to be used as a Cossack winter settlement [1]. Beginning from 1957, the local and the only existing school at that time in Verkhoyansk, began to collect findings on the history of the town. Based on these findings, a local lore museum was created. The exhibition of the museum titled “The Pole of Cold of the Northern Russian hemisphere” has a large range of historical findings connected to the unique aero-hydrometeorological station. The museum is also unique in its displays of Yakut cultural heritage of the Verkhoyansky district. A yurt, which is an ancient dwelling, was set up next to the main museum complex.

The administrative district under study has raw materials deposits, including tin, antimony, gold, silver, tungsten, copper, etc. In the Soviet times, there used to be large excavations of tin near the towns of Bataguy and Ese-Haya, including the Kester deposit, and gold was retrieved in the town of Laso.

The current status of the district makes it an agricultural area. The agricultural sector comprises of meat and dairy production, horse- and reindeer herding, and fur trade.

Oymyakon is another location which can potentially be considered the Pole of Cold of the Northern hemisphere. The village is located below the Polar Circle. It is situated in the mountain hollow, in which, during the nighttime the cold air condensates; this explains its territorial location in the Pole of Cold of the Northern hemisphere, regardless the fact that it has not been recognized as such up to date. The meteorological observations are not held precisely in Oymyakon itself but in the airport with the same name; it is located 40 km away from the village and 2 km away from the township of Tomtor.

Oymyakonsky ulus (region) is situated in the north-eastern part of the Sakha Republic (Yakutia) covering an area of 92.2 sq. km making it the 14<sup>th</sup> largest territory of the republic. The Oymyakonsky district shares borders with the Magadan Oblast in the east and with the Khabarovsk Krai in the south, it also can common borders with the Tomponsky district in the west and the Momsky district in the north. The Chersky and the Verkhoyansky mountain ranges run through the territory of this district. These mountain ranges have the highest peak point in the European part of Russia, i.e., the Mus-Haya peak (3,011 m) [2].

The Oymyakonsky district is located in the heart of mountain ranges and peaks. The relief of the area comprises of the following chorographical units, the largest of them being the Oymyakon mountain range situated in the center of the district of the north-east of the Nerskoye low range. The mountain range systems of the district in general make up a natural large-sized basin, called the Oymyakon basin. The main reasons for the formation of extremely low temperatures in the Oymyakon region are seen in the relief: it has isolated valleys, basins and it is at a distant location from the ocean; apart from this, there are circumpolar processes which affect the climate [3].

The Oymyakon district acquired its status as the Pole of Cold due to the extreme low temperatures. In 1924, the Russian scholar and geologist, Sergey Obruchev recorded the lowest temperature in the northern hemisphere, as low as  $-71.2^{\circ}\text{C}$ . The Oymyakon region has always aroused a lively interest among Russian and international tourists alike [*Ibid.*, 3].

In general, when the two poles are compared, they have an approximately the same average temperature of  $-69^{\circ}\text{C}$ . “The Oymyakon Station is located in the basin, for this reason, it makes it difficult for the air temperature to change. The reason for the low average monthly temperature decrease in Oymyakon is the radial freezing process and weak inflow of warm air” [4].

The Verkhoyansk station is located approximately 750 km to the north-west from the Oymyakon station. For this reason, it must be significantly colder in Verkhoyansk compared to Oymyakon (it is considered that the horizontal gradient of the average annual temperature amounts to a few point degrees per 100 km; it might be different for the winter air temperature rates). The difference in the latitude, on the one hand, and the difference in the longitude, on the other hand, is mutually compensated to some extent with regard to the way they affect the air temperature and its minimal rates. The first-hand priority is given to the effects caused by the relief forms [*Ibid.*, 4].

### 3. TOURISM IN THE POLES OF COLD

Local “points of growth” of tourism are concentrated in the places where of unique natural objects and transportation hubs “come into contact”, which is especially noticeable in the middle stream of the Lena River, on the coast of the Arctic Ocean, in the mountains of Verkhoyansk.

The Verkhoyansky and Oymyakonsky districts have a potential for the development of tourism, which is not yet fully realized by local communities. Therefore, in conditions of insufficient funds for the development of infrastructure, the natural conditions and resources can allow the development of ecological, cultural, scientific and extreme tourism, sports hunting, fishing and cruises. However, in the last 5 years, tourism in the Pole of Cold, i.e., Oymyakon is gaining its popularity among tourists from different countries. According to V. Obedin, “one of the most popular tourist routes in the republic is the winter rally to Oymyakon within the framework of “the Pole of Cold Festival”, not counting summer cruises to Lena Pillars [5].



Being the Cold Pole of the northern hemisphere, Oymyakon is covered by tourists much more efficiently than Verkhoyansk: the airport contributes to the rapid achievement of the goal. In the village of Tomtor (where the writer V. Shalamov served the last two years of his exile), a tourist rally is held annually, and in Oymyakon itself the local Santa Clauses gather annually. "Today the 'Pole of Cold Festival', and the 'Winter begins in Yakutia' festival and many other events are held with the direct participation of Chyskhaan (the Yakut Santa Claus); domestic and foreign travelers strive to get to Oymyakon district to meet with Chyskhaan and experience 'frigid' cold" [6].

In the scientific literature and more often in the media, as well as in the discourse of tourist advertising in Yakutia, the natural cultural landscapes of Kisilyakh Verkhoyansk district are mentioned. The Kisilyakh Mountains cover a total area of 121 sq. km and are one of the most unique and highest peaks of the Verkhoyansk district, containing the remnants of rocks. In the spurs of the Kisilyakhsky ridge, one can meet Kigilyakhs (or rock formations) of various forms, for example, "The Martian", "The Penitent Magdalena", "The Wounded Soldier", "The Gates of Hell", "The Head of the Giant", etc. "Kisilyakh (in Yakut language) is a tall stone pillar, a weathering figure, a rock sticking up on the surface of flat mountains. From a distance, they look like a person or a group of people, for which they are named after the Yakut word *kisi* - "person". The term is widely used in regional geography, literature in a distorted form of Kigil instead of Kisilyakh-Tas - "man-stone" [7]. Due to the fact that the local people consider the Kisilyakh mountains to be sacred places, tourist trips to these places are not frequent, although among tourists this direction is in a particular demand. The key factors limiting tourism in the Verkhoyansk district are:

1. Poorly developed infrastructure. Due to the lack of its own revenues in the district budget for a number of years, there was no major overhaul, technical renovation of housing and public utilities facilities, transport, communications, road repair, high wear-off, low comfort, lack of an airport in Verkhoyansk, additional services, lack of professional hotel staff, the discrepancy in the price and quality of the services provided, which resulted in the lack of the prerequisites and incentives for the development of tourism. The instability of the work of life-support facilities, poorly developed communication, transport scheme, inaccessibility of information necessary for entrepreneurs, are factors hindering the development of tourism in the district;
2. The lack of potential knowledge of possible tourism workers and entrepreneurs on the basis of tourism and service, opening and running their own business, business planning, taxation; as a result, there is a low level of local service that does not meet international standards; all these are additional factors hindering the development of tourism in the region;
3. The clear seasonal accessibility of internal transport links.

In addition to the adverse factors hindering the development of the tourism industry in the territory of Verkhoyansk district, there are a number of favorable factors for solving problems related to tourist activities:

1. There is a significant touristic and recreational potential and unique objects of the tourist area;
2. There is a favorable ecological situation and a peaceful social-and-political attitude, as well as tolerance among the local society.

#### 4. CONCLUSION

Thus, the existence of two cold poles in the Arctic is still controversial. However, it should be noted that the "Pole of Cold" in itself must bear a certain sense of a sustainable concept, integral and unique in its nature. In this sense, we believe that the proclamation of Verkhoyansk as the "Pole of Cold" had

a scientific basis and registration. The first observation of a low temperature of - 67 ° C was registered in Verkhoyansk by the researcher S. Kovalik in 1885, that is earlier than in Oymyakon (1924), but with a mark of - 71° C. The first meteorological station was established in Verkhoyansk, and the city was one of the first to become an outpost of scientific research in the Arctic.

Oymyakon is being visited by tourists much more efficiently than Verkhoyansk, since the airport contributes to the rapid achievement of the goal in the summer, and in the winter the tourists use the Kolyma route. In terms of infrastructure, Verkhoyansk seems to be difficult to reach, in order to reach this destination, it is necessary to fly to the airport of Bataguy, and then go there by a heavy dirt road.

The strategy of sustainable tourism on the poles of cold should be based on understanding the cryosphere as an active element of the universe, as a resource, a source of opportunities for mankind, but not as a source of a threat. The cold constitutes a specific habitat which makes an impact on all spheres of human life.

Such approach to perception of northern territories as an innovative resource of development of a region is quite relevant to the strategy of sustainable development and sustainable tourism of Northern and Arctic territories of Russia.

First of all, tourism development should take into account the fragile sociocultural and ecological system, respect the cultural heritage of local communities, their adaptation experience to severe environment.

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# MARKETING IN THE NON-PROFIT SPHERE ON THE EXAMPLE OF THE INTERNATIONAL STUDENT ORGANIZATION “BEST” OF THE URAL FEDERAL UNIVERSITY

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**Abstract:** Every year, more and more non-profit organizations are being created in our country and in the world, the main purpose of which is not related to making a profit and distributing it among its members. The main goal of non-profit organizations activities is to obtain a social effect, solve the problems of certain groups of people, improve the quality of life of the region and the society. The social effect, the carrier of which is considered a non-commercial product and which arises as a result of non-commercial exchange, appears due to the satisfaction of consumer demand. It should serve as a signal to investors about the need to finance the activities of a non-commercial entity. The social effect is an indicator characterizing the qualitative aspect of the change that has already occurred (raising the educational level of the population, satisfaction with social status or a financial situation, increasing the number of children in families). One of the best examples of non-profit organizations is “BEST” (Board of European Students of Technology). It is a non-political volunteer organization aimed at developing engineering students. It helps students from Europe be internationally minded, better understand the culture of different countries and develop the potential for working at the international level. Nowadays there are ninety-six local BEST groups in thirty-three countries, four of which are located in Russia: two in Yekaterinburg, and one in Moscow and one in St. Petersburg. In the capital of the Urals, one of the groups exists on the basis of the Ural Federal University named after the first President of Russia B.N.Yeltsin.

**Keywords:** marketing, marketing mix, non-profit organizations, social effect, international student organizations.

## 1. INTRODUCTION

Nowadays the number of non-profit organizations is growing. The competition is getting higher. Each organization is trying to attract more consumers. The specifics of promoting non-profit organizations differs from the marketing activity of commercial organizations.

At the same time, one can observe the penetration of marketing elements into the non-commercial sphere. Marketing tools are widely used in various non-commercial activity: political parties, charitable foundations, state budget structures, etc.

The federal law states that “non-profit organizations can be created to achieve social, charitable, scientific and managerial goals, in order to protect the health of citizens, develop physical culture and sports, meet the spiritual and other needs of citizens, protect the rights, legitimate interests of citizens and organizations, and resolve disputes and conflicts, the provision of legal assistance, as well as for other purposes aimed at achieving public goods.” [1]

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These organizations do not receive profits, their work is entirely carried out on enthusiasm of their creators and participants. The goals of non-profit organizations and the people who are in them are different. People joining such organizations seek to satisfy both personal interests and influence the life of society. The main idea of non-profit organizations is to have a positive impact on society and benefit. Measuring the social effect is carried out by various approaches, namely market, income and cost.

Thus, non-profit organizations can be characterized as socially useful associations whose activities are aimed at improving the state of society. Annually the number of such organizations increases, as people strive to improve the life quality of the population, focusing on intangible benefits, such as spiritual, educational and other values.

## **2. METHODOLOGY**

Ph. Kotler gives the following definition: “non-commercial marketing or marketing of non-commercial organizations is marketing carried out by organizations and individuals who act in the public interests or advocate any idea and do not try to make a profit.” [2, p.364]

A. Braverman argues that “non-profit organizations do not set goals for increasing profits; for them non-financial goals are as important as financial goals.” [3, p.58].

As for making profits by non-profit organizations, in accordance with the law of the Russian Federation, “a non-profit organization can carry out entrepreneurial and other income-generating activities only in case it serves the achievement of the goals for which it was created and corresponds to the specified goals, provided that such an activity is specified in its constituent documents.” [4]

Thus, non-profit organizations in the Russian Federation have the right to carry out activities aimed at making a profit for their further functioning, however the members of such communities have no right to extract personal financial gain for themselves.

## **3. DISCUSSION AND RESULTS**

In non-profit organizations fundraising plays an important role, i.e. the activity of the non-profit organization based on its unique mission and strategy, using effective and productive ways to get the resources it needs to implement its programs and achieve its goals, providing the desired satisfaction to the donor.

Ph. Kotler identifies 4 types of non-commercial marketing: marketing of ideas, marketing of individuals, marketing of places and marketing of services [5, p. 578]. The task of the latter is to promote services to increase its value, attract more consumers, form a circle of loyal customers, etc. [6, p. 356].

In order to carry out marketing activities, non-profit organizations must perform traditional marketing functions. In the activities of non-profit organizations, an important role is played by the marketing mix.

The initial concept was created by D. McCarthy in 1981, it includes four components (“4Ps”): product, price, distribution channels (place), communication (promotion). In the future, this

concept was expanded M. Bitner. Other 3 Ps were added: people, process, material evidence (physical evidence) [7, p. 56].

Promotional complex tools are widely used in the marketing activities of non-profit organizations, but each component of the marketing mix in non-profit organizations manifests itself in a different way compared to commercial organizations.

“BEST” (Board of European Students of Technology) is a non-profit, non-political volunteer organization aimed at developing engineering students. The idea of creating this organization appeared in 1987 in Stockholm during the conference dedicated to students of engineering specialties.

Following the conference, it was decided to arrange an international week every six months in different countries for European students of engineering specialties to communicate and share experience. After several meetings, “BEST” was organized in 1989 in Berlin. In November 1990, “BEST” organized the first two-week educational courses in Budapest.

The organization began to grow and its local groups (branches) started appearing in different European countries. Since 2002, “BEST” has been organizing EBEC engineering competitions on a local, regional and global level.

The organization has three stakeholders: students (yellow color on the logo), university (green color on the logo) and company (blue color on the logo). If a local group does not have support for one of these components, then it cannot exist. To support organization’s activities, partners are often required, such as Coca-Cola, Sberbank, UMMC, Unilever, ZIC and others.

The vision of “BEST” is power in diversity. It means that people understand and respect different nationalities and cultures, which makes them more united, responsible and tolerant.

The mission of “BEST” is the development of students. The company allows students to expand their international thinking, learn about the culture of various countries and develop the ability to work in the multicultural environment, creating students’ personal growth and revealing their potential.

The international student organization “BEST” has 5 values: flexibility, friendship, fun, improvement and learning. Let’s consider them in details.

1. Flexibility. Members of the organization look for the opportunity to make changes and cope with unstable situations around. They are always open to something new, value and increase their mobility, and also quickly react to changing situations and obstacles they face.
2. Friendship. In “BEST” people build good relationships in which they help, support and care for each other. Teamwork is valuable to them. They focus on each person who participates in their activities and thus create synergy.
3. Members of the organization enjoy all that they do. They appreciate the positive emotions of people and strive to ensure that everyone is pleased to work in the organization. They are eager to get involved in their work and try to convey this feeling to others.
4. Improvement. They constantly strive to raise the standards of everything they do. They also use all their creativity, imagination and potential to improve their work. This ensures the continued organization development and the people in it.



5. Training. People in the organization acquire new skills and knowledge through experience. They value this experience and strive to get it from all areas of their work. They also value personal development and strive for open learning community where everyone can freely share their ideas.

As for local groups, their main activities are organizing and promoting international external and domestic events, as well as local ones. The latter, as a rule, are aimed at the students of their University, e.g., some local groups organize job fairs or company presentations at their Universities. Since almost all “BEST” events are completely free of charge, local “BEST” groups need fundraising these projects.

The local group “BEST” has existed in Ural federal University since April 14, 2003. Every person coming to the organization can find something for his personal development and choose the sphere in which he wants to learn and improve.

The international student organization “BEST” is engaged in developing students, both within its structure and not belonging to its number. They learn to communicate, build relationships with large companies for cooperation, promote materials, manage and coordinate many other important and useful things. The organization allows students to travel to different countries, where they can find new friends, practice the language and find a good job abroad. All this attracts many students throughout Europe. Inside the organization, a friendly atmosphere reigns, there is mutual assistance and mutual support.

Based on the analysis of the marketing activities of the “BEST” organization (SWOT - the analysis of an international student organization, competitiveness analysis, segmentation of consumers of student non-profit organizations), the following marketing decisions were made: strategic, tactical and operational.

Based on the SWOT analysis of the international student organization “BEST” of Ural federal University, the weaknesses of this non-profit organization were identified:

- lack of consistency in providing information on the work being done (e.g., in core team, in departments, etc.) to other members of the organization;
- insufficient level of qualifications of organization members in working activities, in managing the organization, etc.;
- insufficiently effective work of PR department;
- a low English level of many “BEST” Ekaterinburg UrFU members;
- a lack of mechanisms for motivating non-profit organization staff.

The greatest strengths of the international student organization “BEST” are successful communications with stakeholders (University support, companies that are ready to cooperate with the international student organization “BEST”, high demand for student services).

In the presence of such serious threats to the external environment as the absence of sponsors willing to support the international student organization “BEST” and the availability of such services among competing organizations, it is important for the non-profit organization “BEST” to improve their competitiveness promotion of the “BEST” brand, increase the service promotion complex, develop a participant motivation system and work out the conditions for learning

English by all the organization members, relying on the strengths of the non-profit organization and using the capabilities of the external environment.

Based on the segmentation, the target segments were identified and the basic values of consumers were fixed, which must be oriented to improve the efficiency of the service delivery process. They are the following: unique educational activities; technical focus of activities; fame of the organization; the opportunity to get acquainted with the culture of Europe and Russia.

In addition to consumer analysis, a competitor analysis was conducted based on a competitiveness polygon and a competitiveness assessment sheet. The international student organization “BEST” has two closest competitors in the market of non-commercial services in the city of Yekaterinburg: the international student organization “AIESEC” and the student organization “Buddysystem”.

AIESEC is an international youth public organization that brings together students and recent University graduates to uncover and develop the leadership and professional potential of young people to make a positive contribution to society.

The support service of foreign students in UrFU is «Buddysystem» organization. The main purpose of the service is meeting and accompanying foreign students, assisting in their adaptation at the University and in extracurricular life, as well as promoting the development of intercultural competencies among students of Ural federal University named after the first President of Russia B.N. Yeltsin.

#### 4. CONCLUSION

Having analyzed the activities of the international student organization “BEST” in accordance with the matrix of I. Ansoff, one can conclude that the most appropriate strategy for the organization is the penetration strategy. In order to implement a strategic marketing solution, a great variety of activities was developed:

- personnel training in CRM, as well as training for staff development;
- developing activities with greater focus on Russian stakeholders using the URFU brand, as well as creating an advertising campaign to attract Russian stakeholders;
- conducting online conferences and events (e.g., training) with foreign students and members of European local “BEST” groups;
- holding joint events for consumers of international student organizations and students and creating a joint advertising campaign;
- developing a financial contingency plan, and an advance miscalculation of opportunities for saving, avoiding risks and finding alternative sources of funding in case of sponsors lack;
- developing larger scale activities, taking into account government support;
- organizing joint activities for members of the organization in English to increase employee motivation, production with the symbols of organizations and events;
- participating in events organized by state structures on the basis of cooperation with them as partners;
- developing an advertising campaign to attract more consumers than its competitors;
- developing larger scale activities, taking into account possibilities of state support;

- organizing joint activities for members of the organization in English to increase employee motivation, production with the symbols of organizations and events;
- organizing internships with the provision of a workplace in the company in the future to the best students, including members of the international student organization “BEST”;
- conducting an educational course with the participation of external media for the purpose of PR;
- staff development with using opportunities and training programs of state support;
- conducting events to increase the motivation of employees of the corporate relations department;
- systemic publication of articles on non-profit organization activities in a youth magazine, organizing TV filming events held at the UrFU site, making a film about a local BEST group together with the media;
- inviting company representatives as speakers for events with feedback;
- introducing new communication channels into the system of interacting the international student organization “BEST” with state structures implementing a program of support for volunteer organizations;
- holding an event based on public readings of image articles of other local “BEST” groups;
- conducting a survey among potential participants to select the most interesting topic of an educational event;
- conducting a competition in the mailing list for writing an image article of the organization and its further publication in external media sources;
- organizing and its further publishing in external media sources;
- advertising for companies providing career opportunities in Gmail and other online services;
- creating a special mailing list for consumers of services, holding information meetings in the mode of online conferences with the aim of improving the quality of organized events.

The implementation of these measures will allow “BEST” to further improve its competitiveness, provide an opportunity to continue receiving a social effect, to function successfully as a non-profit organization.

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# UNIVARIATE METHOD OF MEASURING NATURAL RATE OF INTEREST: ALBANIA

Altin Zefi<sup>1</sup>

DOI: <https://doi.org/10.31410/ERAZ.2019.159>

**Abstract:** *We use univariate methods to measure the natural rate of interest for Albania. Natural rate of interest is an important tool in monetary policy. It has been described as the rate that provides price stability and full employment. The natural rate of interest is widely used as an indicator for the monetary policy. A policy interest rate below the natural rate of interest is seen as expansionary, while a policy interest rate by a Central bank, is seen as contractionary for the monetary policy. We find that Albania's natural rate of interest is below zero while the real interest rate is also below zero but close to the natural rate of interest. We conclude that Albania's central Bank monetary policy is not as accommodative and expansionary as it's indicated in the central bank's public announcements.*

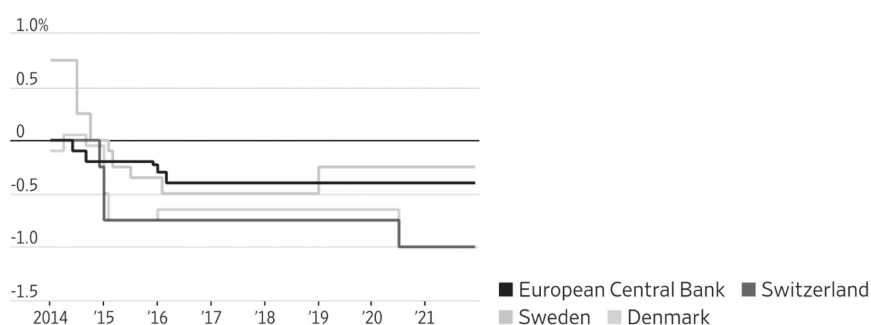
**Keywords:** *Monetary policy, natural rate of interest, negative interest rate, real interest rate.*

## 1. INTRODUCTION

Natural rate of interest is an important tool in monetary policy. It has been described as the rate that provides price stability and full employment. Wicksell described it as such:

*There is a certain rate of interest on loans which is neutral in respect to commodity prices, and tends neither to raise nor to lower them. This is necessarily the same as the rate of interest which would be determined by supply and demand if no use were made of money and all lending were effected in the form of real capital goods (Knut Wicksell- Interest and Prices, 1898 p .102)*

European Economies have struggled with low economic indicators for the last 10 years. In order to jostle their numbers and economy back to growth they have experimented with unconventional tools like negative interest rate. In a state with negative interest rates banks and institutions pay the central banks a percentage in order to safeguard their money, instead of getting payments back on their deposits. These costs are passed down to the clients, who instead of being paid for depositing their money at the bank, are charged. This is supposed to discourage savings and bank deposits and instead encourage spending and through lower interest rate investments.

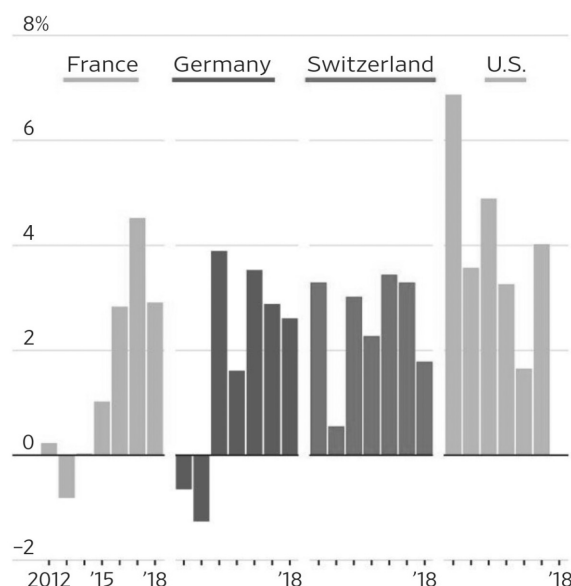


**Figure 1:** Central Bank rates. Source: European Central banks and wsj.com

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According to Blackstone (Blackstone, 2019) banks in the European economies struggle with slim profit margins due to low income on interest which in turn lower their ability to finance development. This has caused these banks to lag behind American counterparts.

Blackstone sees the negative effects of negative interest rates in many fronts. Firstly, the northern countries in Europe have a healthier development and don't need negative interest rates. Secondly, the countries that do need to have negative interest rates to boost their struggling economies aren't benefiting from it. Thirdly, negative or low interest rate help profitless companies stay afloat and as a result steering away recourses from more efficient and viable companies. Fourthly, allowing inefficient companies to stay in business produces an economy that is not as productive and competitive as in other countries where inefficient ideas are pushed off the market. Fifthly and lastly, and probably the most important negative interest rates for prolonged periods of time reduce the ability of Central banks to respond to unexpected economic downturns. In the scenario of crises Central banks don't have at their disposal this important conventional tool of lowering interest rates.



**Figure 2.** Annual changes in Capital investment.

Source: OECD and wsj.com. Note: 2018 data for U.S not available.

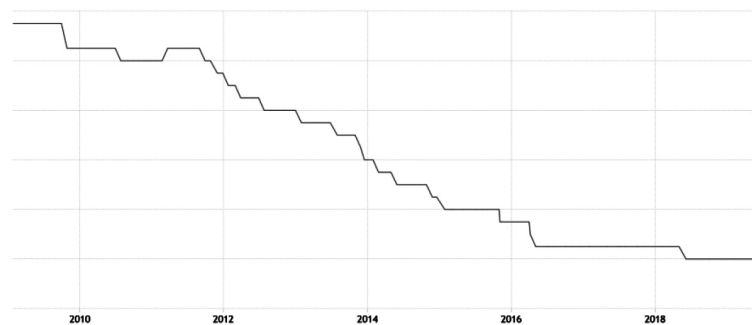
Despite negative interest rates capital investments have not soured, on the opposite data on capital investment have been sluggish. France had a growth to above 4% in 2017 compared with right under 3% in 2016 but in 2018 France Germany and Sweetland had a sharp decline to 2% or less.

Albania has followed its world and European counterparts in lowering its base policy interest rate, the repo rate.

Although low interest rate, by the Albania's central Bank, have lowered the borrowing costs for consumers and businesses it is difficult to extract exactly has contributed to a small upturn in the economic activity.

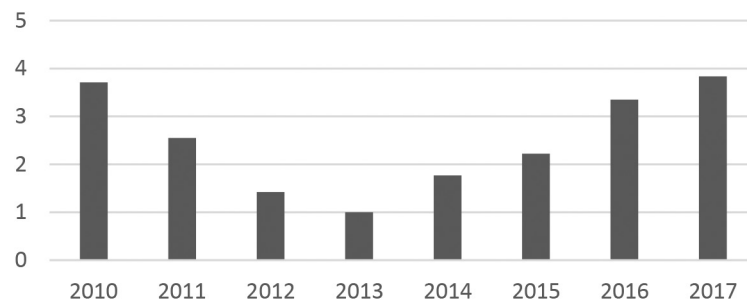
Despite the accommodative monetary policy through low repo rates Albania has lagged behind almost all regional countries.

Alternative Bank CEO, Martin Rohner says that negative interest is a new normal. Banks and large institutions, like hedge funds and pension funds, are increasingly understanding that this is a fact of life.



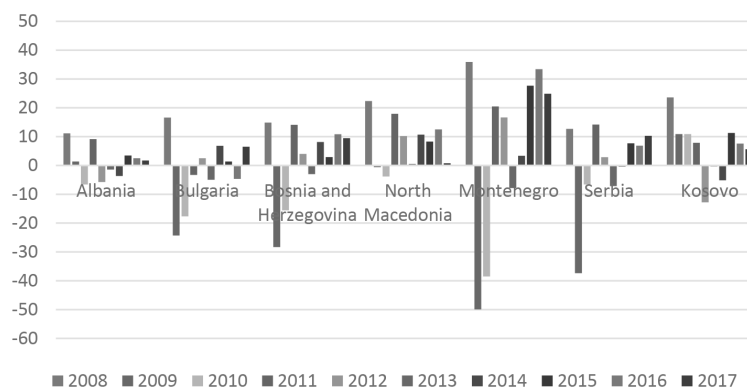
**Figure 3:** Albania's REPO rate.

Source: Bank of Albania



**Figure 4.** Albania's GDP change from previous year.

Source: Bank of Albania



**Figure 5.** Gross capital formation across several economies.

Source: World Bank

Europe's negative interest rate has had a positive effect in Europe and a negative one in Albania. Low interest rate has lowered exchange rate which in turn has made exports from Europe cheaper and imports more expensive, thus attracting other countries to buy from them.

Albania struggles with a strong ALL and Central bank policy makers have not been able to tackle the problem.

Despite unprecedented low interest rate data suggests that lowering interest rate has not been adequate in jump starting the economy.



We come to the question of this study: What is the natural interest rate, the interest that keeps full employment (or near natural rate of unemployment) potential growth of the economy and low inflation?

We shall try to answer this question.

## 2. LITERATURE RESEARCH

According to Lubik & Mathes (Lubik & Mathes, 2015) the natural interest rate is a key concept in monetary economics because it allows policy makers to assess if monetary policy is contracting economic activity or is it helping to accelerate it. Natural interest rate help interpret and analyze the connection of monetary policy to economic activity.

Natural interest rate usage dates back to Knut Wicksell who in the very far year of 1898 defined natural interest rate as the interest rate that produces a stable inflation.

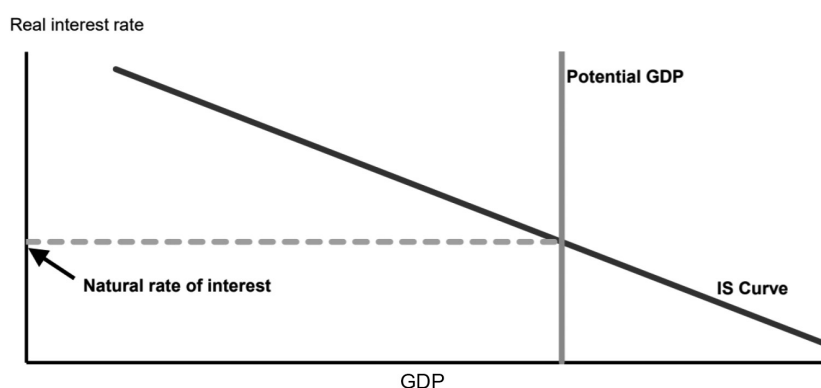
According to Lubik et.al (ibid) its modern use can be attributed to Colombia professor Michael Woodford. Woodford in 2003 (Woodford, 2003) connected the natural rate of interest to modern macroeconomic thought.

Woodford (2003) says that “an inflation-targeting central bank can steer the economy toward the natural rate and price stability by conducting policy through the application of a Taylor rule, which links the policy rate to measures of economic activity and prices.”.

For this reason, Central banks will have a high interest in measuring the natural interest rate and using it to steer monetary policy towards stable prices and full potential economies.

The figure below shows the process of determination of natural interest rate. IS curve is sloping downwards as the real interest rate affects negatively investments and savings. Potential GDP is, in short term, fixed.

The equilibrium real interest rate that supports potential GDP is the natural interest rate.



**Figure 6.** Determination of Natural Interest rate.

Source: Laubach&Williams (2015)

Mosler and Forstater (2004) point to the fact that the concept of “natural” rates has been used for other economic indicators like the natural rate of unemployment and economic growth.

Marshall didn't like the word "natural" as it implied a "law of nature" (Eatwell, 1987) with the word "normal". According to Mosler et al. (2004) "natural" refers to conditions of values that hold under general conditions, rather than specific.

Same authors continue to argue that the natural interest rate trends towards zero in the conditions of a budget deficit and floating exchange rate.

Mosler and Forstater say: *"In a state money system with flexible exchange rates running a budget deficit—in other words, under the 'normal' conditions or operations of the specified institutional context—without government intervention either to pay interest on reserves to offer securities to drain excess reserves to actively support a non-zero, positive interest rate, the natural or normal rate of interest of such a system is zero."*

Evidence may support this conclusion. The dawn of the great financial crises and large government deficits have substantially reduced the natural rate of interest. These are the conclusions of then FED chairwoman Janet Yellen in her 2015 analyses.

Laubach and Williams made popular the idea that in the short run natural interest rate is important component of monetary policy as it relates the policy interest rate to that of the natural rate. It helps stabilizing and recovery during cycles of the economy.

### 3. MODEL OF CALCULATING THE NATURAL RATE OF INTEREST

#### 3.1. Univariate Methods of calculating natural rate of interest.

Although such univariate time series methods could be unreliable during periods when inflation and economic activity are unstable, they can work well at estimating the natural rate of interest when inflation and economic activity are relatively stable. Univariate methods are likely to accurately measure the natural interest rates and when these rates have deviated from the natural rate (Laubach et al., 2015).

#### 3.2. HP filter

HP filter is one the most commonly use filter to decompose trend growth from cycles.

The Hodrick Prescott method is widely used to estimate trend indicator and cycle movements. HP filter decomposes times series  $Y_t$  in two components: trend component, which can be interpreted as the trend natural interest rate, and cyclical components, which is the deviation of real interest rate from natural interest rate trend.

$$r_t = r^*_t + G_t \quad (1)$$

This method assumes that the cyclical components fluctuate around the trend components with time diminishing amplitudes. Therefore, the average of the deviations of  $r_t$  from  $r^*$  is assumed to be near zero over a long period of time. HP filter minimizes variances according to a given weight  $\lambda$ . For yearly data, such as our case, a smoothing parameter  $\lambda$  of 100 is used. The higher the  $\lambda$  the smoother the trend will appear.

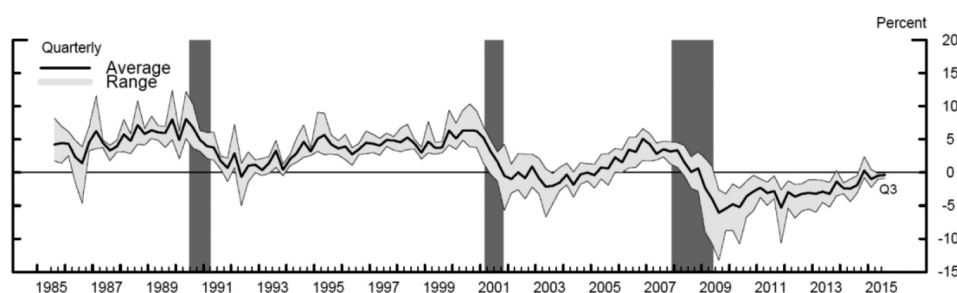
Kota (2007) summarizes the drawbacks of univariate methods such as HP filter. As mentioned above univariate methods give good results during times of stable economy but are not very reliable in developing countries with highly unstable economies. Another disadvantage of the univariate methods is that the high-end sample biases. These methods use smoothing parameters to minimize deviations from trend. The minimization problem which derives the trend series, aims to penalize deviations from trend and smooth the trend series. At the end of sample, this penalization is missing; Therefore, the trend will react more to transitory shock at the end of the sample than at its middle, see Kota (2017).

### 3.3. Multivariate methods of calculating Natural rate of interest

According to Yellen (2015) there are four models for calculating natural rate of interest:

1. The dynamic stochastic general equilibrium (DSGE) model development by the staff of Federal Reserve Board and described by Kiley (2013),
2. DSGE model developed by the Federal Reserve of New York and described by Del Negro and other in (2013),
3. DSGE model developed by the staff of Federal Reserve Board based in Christiano, Motto and Rostagno, (2014),
4. Laubach-Williams model developed by Laubach and Williams (2015).

The shaded green are the variations between four models calculating the natural rate of interest. What is clear is that all four models report a decline in the natural rate of interest during the great recession and a small recovery.



**Figure 7.** U.S. Natural rate of interest.

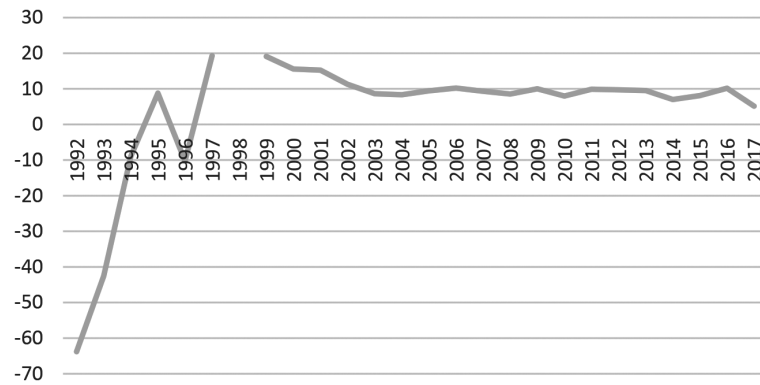
Source: Janet Yellen “The Economic Outlook and Monetary Policy” 2015.

## 4. DATA ON UNIVARIATE MODEL FOR MEASURING NATURAL INTEREST RATE

Univariate method for measuring output gap and natural rate of interest are fairly reliable in periods of stability. Though it does not do well for prolonged periods of rising and decline in inflation (see discussion in Laubach & William, 2001), these methods could in principle work quite well in times of stability.

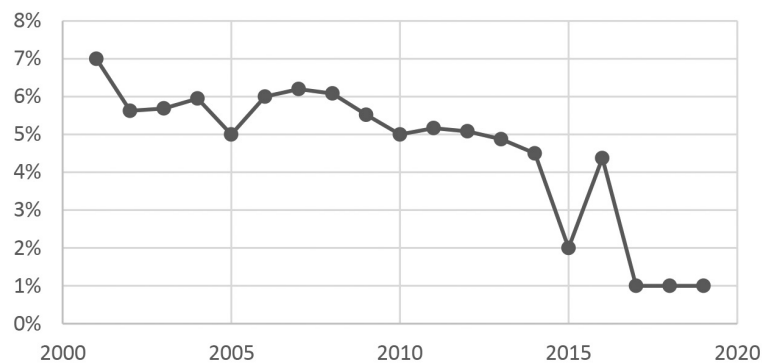
Over such periods natural rate of interest mirrors quite well reflects the average of real interest rate.

Laubach and Williams (2015) suggest using real short-term interest rate long trend to measure natural rate of interest. The Central Bank of Albania uses REPO's (1 week repurchase agreement) as its main instrument of monetary policy to affect the short-term interest rate in order to affect other term interest rates.



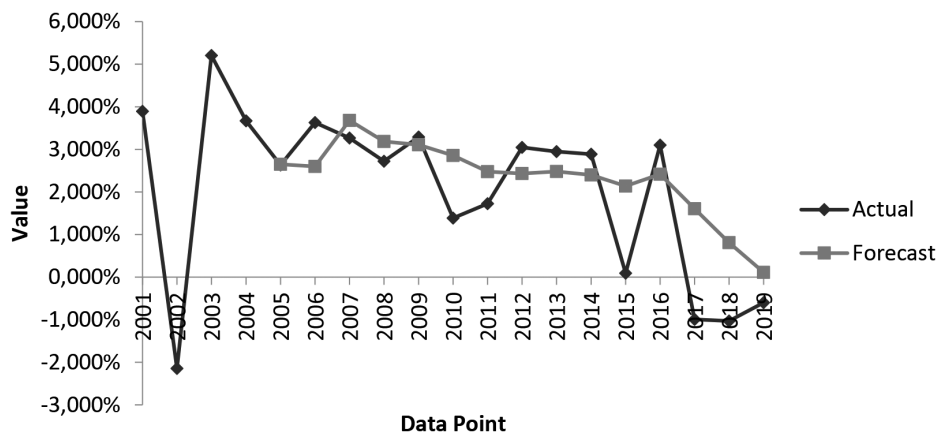
**Figure 8:** Albania's average real interest rate has been quite stable since 2001.  
Source: Bank of Albania

Albania's shorter-term nominal REPO rate is shown in the following figure:

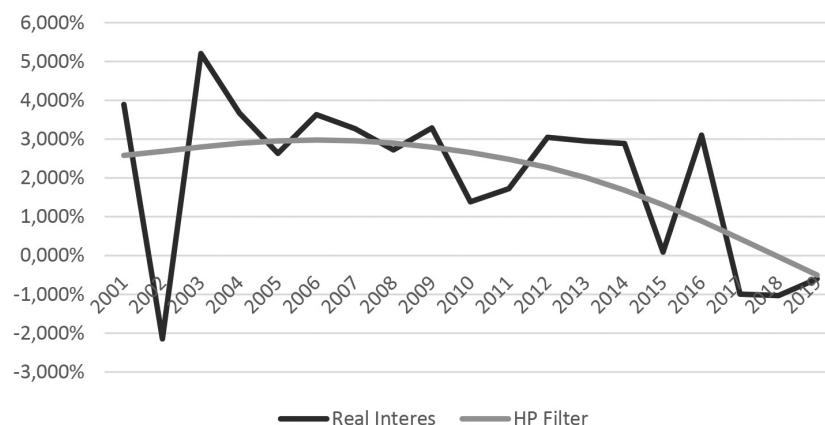


**Figure 9.** Nominal Repo Rate for Albania.  
Source: Bank of Albania, Authors calculations

We have taken the average REPO rate of a year. Real nominal interest rate is calculated in the Phisher model through yearly CPI and we arrive at the real short-term REPO rate. Laubach&Williams (2015) use the PCE index to arrive at the short-term real interest rate. CPI (Consumer Price Index) reports have reported higher inflation than PCE. Because we lack the PCE data for Albania we have substituted PCE with CPI and will be mindful of the tendency of CPI to report higher inflation.



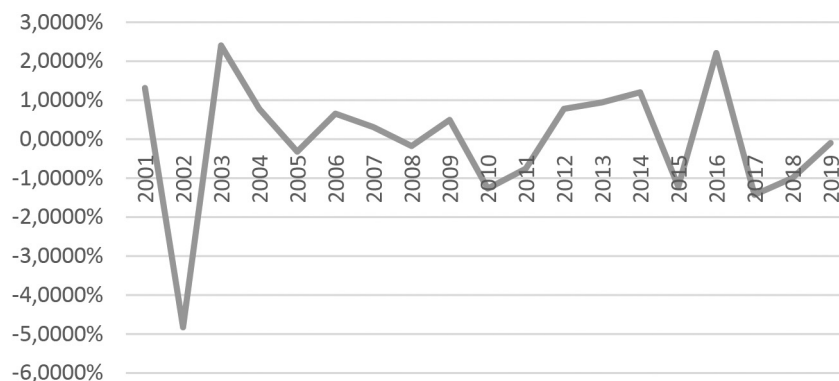
**Figure 10.** Univariate method – 5 year moving average.  
Source: Bank of Albania and author's calculations



**Figure 11.** Natural rate of interest through HP filter.

Source: Author's calculations

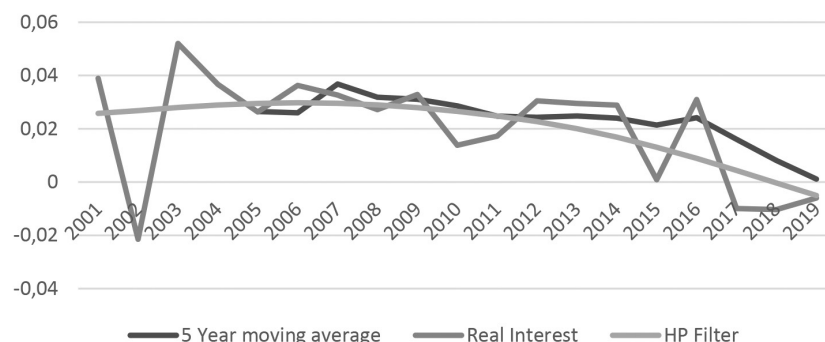
As expected, the residue component is high during periods of high volatility in Albania. Deviations from trend get smaller as the country moves into periods of macroeconomic and financial stability.



**Figure 12.** Cyclical component natural interest rate - Albania.

Source: Author's calculations

We compare the real interest rate for Albania between 2001 and 2019 with 5 year moving average method and HP filter method.



**Figure 13.** Real interest rate.

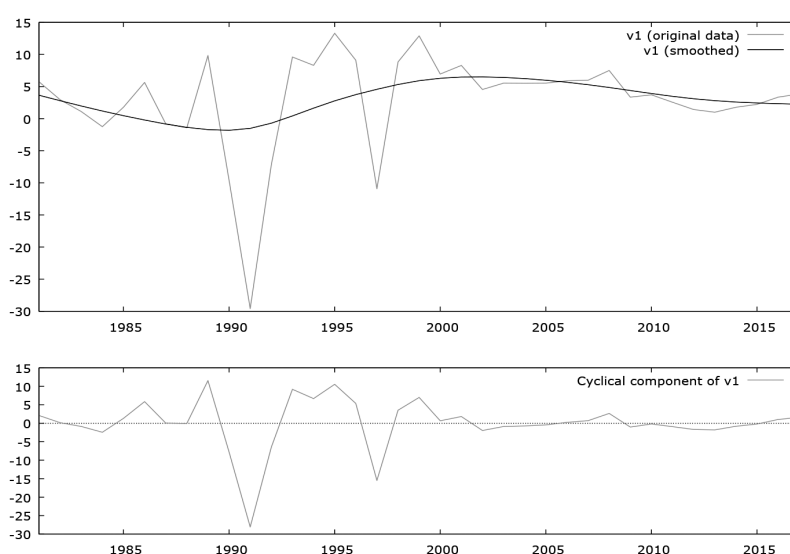
Source: Bank of Albania and author's calculations

## 5. DATA RESULTS

Both methods show a steady decline in the natural rate of interest ensuing the Great Financial crises of 2008. The results show a two-sided estimate for the natural rate of interest for Albania. We have considered 18 year, between 2001 and 2019. 5 year moving average shows an increase in 2016 of the natural rates of interest but then follows the same trend result as the HP filter with sharp decline. HP filter calculates the natural of interest at below zero in 2019 while the 5-year moving average calculates it at right above zero.

The trend is clear in both univariate methods of calculating the natural rate of interest. This represents a historically low level of the natural rate of interest. Same results are seen in EU and US calculations as in Laubach & Williams (2015).

The decline in the natural interest rate is accompanied with decline in potential output.



**Figure 14.** Albania output actual and potential 1981 – 2017.  
Source: Bank of Albania and the author's calculations

The Central bank of Albania has followed an accommodative monetary policy with key nominal interest rates at 1%. Inflation has also stayed below the target inflation.

We conclude that monetary policy has not been as accommodative as policy makers think. The natural rate of interest is in the negative territory and the Central bank should have followed a more aggressive accommodative monetary policy to respond to the decline in potential output and low inflation.

More studies should be performed to see results from multivariate models of measuring natural rate of interest. These results should be compared with the univariate, as measured here, and plugged into models of implications for monetary policy.

What are the implications for the design of monetary policy strategies? In the context of simple policy rule of the Taylor model, strategies of monetary policy do not rely as much on the natural rate of interest. One possible way to substitute is the respond in a more robust way to inflation gap with a higher coefficient in the Taylor rule models.



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# CONTRIBUTIONS TO SUBSTANTIATING THE DECISION TO RELOCATE AN INDUSTRIAL BUSINESS

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**Abstract:** *The relocation of production by which a company partially transfers its production facilities, from one country to another, or from one city to another is a topical issue for industrial affairs. Also known as „offshoring” or „delocalization”, it is one of the concrete and visible aspects of the globalization of the economy. Encouraging businesses, especially producers, to move between states, or between areas of a state, remains a popular policy of local or national economic development. Moving the company is a project that involves a great deal of responsibility, because of the many details that need to be solved.*

*Typically, the decision to move facilities to certain locations or geographical areas is determined by a number of fundamental factors such as: production costs, complexity of markets, access to labor, finance and lending. Frequently it is considered that relocation is not just the answer to a single risk factor (climate, pollution), but a complex of decisions initiated and based on a number of social, economic, environmental and policy factors. In line with research on this topic, the strongest influence on the relocation of an enterprise is its expansion and the need to increase profits.*

*Theories on the relocation of industrial companies are a special case of the theory of location, which is focused on the geographic location of economic activity and the importance of location to support growth of the company. Another important reason for the decision to relocate is cost reduction, due to wage differences, economies of scale, energy prices and other economic and financial factors.*

*Even if it is a long-term decision, sustained by considerable financial support, the criteria of physical, economic, social or political nature with more or less predictable behavior, put managers in the position of always being careful, about the consequences of the emplacement on costs, to take account of a number of unidentified or incorrectly quantified situations and risks, requiring a reconsideration of the geographical situation of the undertaking. The article aims at identifying, grouping and eliminating overlaps, between the criteria considered in the literature at emplacement selection, in case of relocation of production. Optimizing the site selection decision means finding solutions or sets of solutions optimal relocation of production.*

*The solution to the optimization problem is the answer to the question: what is the optimal location option, so that all identified criteria are respected in different proportions? To substantiate the decision to relocate production, the problem of choosing the optimal site was approached as a multi-attribute type, for which those methods were selected and applied, that led to reliable results but at the same time constituting easy tools to be applied by an interested company.*

**Keywords:** *relocation, criteria, decision, model, industrial business.*

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## 1. INTRODUCTION - RESEARCH ORGANIZATION

The relocation of the businesses in one of the subjects of interest for the economic theory and practice and this is due to the spreading of this phenomenon, among the developed economies. This represents a decisional complex based on a series of social, economic, environmental and political factors and it can be described, as an action of moving into a new location, which in-

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volves a great responsibility, due to numerous aspects that have to be settled. It is well known the fact that, for a big size company, the most important aspects to be taken into consideration, when adopting a decision of relocation are: the costs for the transport, staff, utilities, reliability, legislation, natural environment, potential of innovation, the incentives granted by the local or central authorities and others. The settlement of the issue involves the passing over the following steps:

- the analyses of the literature of specialty for the identification of the criteria which determine the relocation of the industrial units;
- the configuration of some objective, determinant criteria, resulted from the study of other researches;
- the approaching of the issue of relocation, as a multiple-criteria decision.

## 2. THE IDENTIFICATION OF THE CRITERIA

**2.1 Market.** Any company providing commodities and services develops its activity in an environment, exerting a strong influence upon it, due to the multiple relations which are established. The nature and the object of these relations is diversified, their identification contributes to the efficient utilization of the production factors, to the achievement of the fundamental objective of the company [1]. The most important relations of the company are those related to the market, since in the competitive economy, both the manufacturer and the consumer, have the possibility to choose freely. The analysis of the market conditions presents importance, for the present and especially for the future of the company, the mechanism of the market being the barometer of the actual and future situation. The market validates the opportunity and the efficiency of the actions, connected to the orientation of the flux of commodities and services, from the manufacturer to the final consumer. The market is the place of testing the products, of new methods for the distribution and promoting of the products. In the same time, the market is the source of information concerning the actual and potential consumers, the structure and the characteristics of the distribution channels, competition, prices and tariffs, information necessary for the grounding of the decisions.

**2.2 The labour force.** Among the ensemble of the production factors, the labour force represents the highest dynamic. The demographic environment of the target area or locality can be a key link, in choosing the layout of the company. The way of organizing of the different activities, specific for the industrial field, should take into consideration the issue of the employing and of the utilization of the labour force. The density of the population and the availability of the labour force, are aspects which the company must take into consideration. A labour force which is already qualified, can contribute to the increasing of the business in a short time. The information concerning the occupation, education, the incomes of the population, the distribution per age, styles of life, the way of spending the free time in a certain area, can suggest to a company the potential for increase and the opportunity of business in the respective environment. A special interest, from the labour force point of view, is represented by the areas having high secondary schools of specialty, universities and faculties specialized in the field of activity of the company or centers of research and development. These aspects are followed up by the companies, in the moment of adopting the decision to layout the headquarters, in an area or in another area, in a town or in another town, since the company can find specialized, qualified people and young people eager to assert.

**2.3. Taxation.** The role of the fiscal system is in close connection with exerting its functions, resides from them and it is manifested in financial, economic and social plan. The fiscal system appears as the main way of attracting the financial sources of the state, role who gains actually a

greater and greater importance. During the previous years, the financial resources available for the central and local authorities know a permanent growing. The fiscal system is highlighted as an important instrument of economic policy, used by the public authorities for influencing the economic processes and for the setting away the imbalances. The central or local authorities of different states of the world facilitate the industrial relocation by the achievement and maintaining of a positive business climate, the main actions being: fiscal facilities, favorable work legislation, networks of utilities financed by the state and others. The policies of regional and local economic growth are designed to attract the companies of the specific sectors. The decision of relocation is deeply influenced by the facilities of fiscal nature offered under different forms: exoneration of taxes and charges, diminishing the value of the VAT or of the tax upon profit, of local taxes, the granted subventions or payment terms not so restricted. The code of fiscal procedure and respectively the Fiscal Code are the most important regulations of the field of activity of the trade companies [2].

**2.4. The legislative system.** The aspects of legislative and judicial nature, out of which the company could not function, are taking into consideration to the relocation of a company. In order to perform a legal activity of a company, the legislation in force must be known concerning the functioning and the procedure of settlement of the trade companies. Each trade company which develops a production activity must be the subject of the provisions mentioned by the fiscal laws [4]. According to the laws in force, the employment of the staff at all the companies, will be performed based on individual labour contract, with the observance of the Labour Code and of the conditions concerning the social insurances.

**2.5. The infrastructure.** The infrastructure involves the means of transport, the equipment for the treatment of water and of the residual waters, telecommunications, generation, transmission and distribution of energy and others. An element of the same importance for the identification of the optimal outlay of production is represented by the road infrastructure, road nodes as well as the accessibility to the highways, to the national and international roads to be transited. The distance towards the main customers and suppliers is another element in choosing the layout of a production system. According to according to some authors, infrastructure was considered as a factor for localization of trade flows between regions [3]. Subsequently, concluded that because of the availability of data, the impact of infrastructure on regional development has become the basic criterion [6]. In 2013, other researchers argued that the effect of infrastructure on economic development varies between industrial groups and modes of transport [7].

**2.6. The raw material.** The raw material is a basic component out of which are manufactured the products, this is the reason why it represents an important element in choosing the layout of the production. The existence of the main raw materials necessary for production – especially when they are expensive or supplied by a small number of manufacturers – the distances of transport and their quality are the main followed up aspects.

**2.7. Utilities.** The issue of utilities is a basic element, analyzed by each investor and followed up during the whole period of running of the production activity. The community services of public utilities involve activities of utility and of public, general interest, developed at the level of the territory, which are under the management and the coordination of the public local authority. They have as aim the satisfaction of the local community requirements and consist in: supplying with water, sewerage and wastewater treatment, collection, drainage and evacuation of rainwater, production, transport, distribution and supplying of thermal energy in centralized system, sanitation, public illumination, administration in public and private field [5].

**2.8. Research and innovation.** Such activities form a process based on which the organizations generate ideas to be valued during the activity of production. New settlements allow the obtaining of some competitive advantages on the market. For the selection of the layout, the management of the company looks for aspects of innovative nature as: human resources qualified in research, an attractive system of research, an environment proper to the innovation, the financial support offered by the state, the existent investments in research, the internet network, the legislation concerning the rights of intellectual property.

**2.9. The natural environment.** The companies often choose for an economy which is disconnected from the surrounding natural environment. The accent falls upon the economic conditions and upon the environment in which the company can obtain a durable, competitive advantage. Such examples are found in the literature, which recognizes the fact that the companies can have a significant, negative impact upon the natural environment. The relocation of the companies can be an alternative for diminishing the pollution of the air in big towns and cities.

Besides the main aspects detailed above there are also criteria of international, national, regional or local influence, which must not be neglected in an analysis of layout, these being: the political stability, the climate of the international relations, the restrictions, the cost of life, the attitude of the community and sometimes these cannot be quantified from the quantity point of view, the lists of control becoming instruments of utile evaluation.

### 3. THE SETTLEMENT OF THE ISSUE

The optimization of the decision of choosing the layout involves the finding of one or more optimal solutions for the relocation of the production. The solution of the optimization issue consists in the answer to the question: which is the optimal variant of layout so that to be observed the criteria previously identified, in different proportions? In order to reply to the question, it is necessary the utilization of some models of decision, in the presence of a multitude of criteria, named models of multiple-criteria decisions.

**Table 1: Identified criterion**

<i>Symbol</i>	<i>Criterion</i>
C1	Market
C2	Labour force
C3	Taxes
C4	Legislative system
C5	Infrastructure
C6	Raw material
C7	Utilities
C8	Research and Innovation
C9	Natural Environment

Such models are framed in two categories:

- a) Multiple-attribute decisional model. Such a model consists in choosing the optimal variant from a finite multitude of variants, compared between them, reported to other criteria. Each variant is characterized depending all the criteria belonging to a finite multitude.
- b) Multiple-objective decisional model. These are decisional situations in which the multitude of variants is finite. They generate models, which aims the maximization or the

minimization of functions having more variables, subject to a system of restrictions [8]. It is followed the establishing of the values of the variables, which check the system of restrictions and optimize every function separately.

The multiple-criteria optimization of the decision of relocation of production, will be approached as a multiple-attribute issue. For the simplifying of the calculus it was chosen a number of five variants, afferent to some countries or distinct geographic areas  $V = \{V_1, V_2, \dots, V_5\}$  and a multitude of criteria previously identified  $C = \{C_1, C_2, \dots, C_9\}$  (Table 1).

**Table 2:** The matrix of consequences

	$C_1$	$C_2$	...	$C_9$
$V_1$	$a_{11}$	$a_{12}$	...	$a_{19}$
$V_2$	$a_{21}$	$a_{22}$	...	$a_{29}$
...	...	...	...	...
$V_5$	$a_{51}$	$a_{52}$	...	$a_{59}$

For each criterion  $C_j, j = 1, \dots, 9$ , to each variant  $V_i, i = 1, \dots, 5$  it is associated a vector representing the result of the evaluation of that variant, depending on the criterion  $C_j$ . Established like this, the vectors will form the lines of a matrix of the consequences, presented in Table 2.

**Table 3:** The weighted matrix of the consequences

	$C_1$	$C_2$	...	$C_9$
$V_1$	$a_{11}$	$a_{12}$	...	$a_{19}$
$V_2$	$a_{21}$	$a_{22}$	...	$a_{29}$
...	...	...	...	...
$V_5$	$a_{51}$	$a_{52}$	...	$a_{59}$
$X$	$x_1$	$x_2$	...	$x_5$

The choosing of the layout is one of the situations in which not all the criteria have the same importance. As a consequence, it is proceeded to the establishing of the importance of the criteria previously presented, using some coefficients  $x_j, j = 1, \dots, 5$  which mentions the importance which the deciding person grants to each criterion separately, and together they form the vector  $x_j$  presented in Table 3.

For the establishing of the solution of the multiple-attribute issue were proposed more methods, depending on the data mentioned into the matrix of the consequences. The literature of specialty offers different methods of settlement, of the multiple-attribute issue and in this category, it is framed also, the optimization of the decision of choosing the layout (Table 4).

From the point of view of informational content, the methods can be:

- Without information upon the preferences, if the decisional person hasn't information upon the fact that some criteria or variants are preferred in comparison with some others;
- With information upon the criteria, which groups the problems according to the importance granted to each criterion, as follows:
  - in case of ordinal preferences, besides the matrix of the consequences it is known also a vector  $V_0 = \{a_{01}, a_{02}, \dots, a_{05}\}$  of the standard levels afferent to the 9 criteria. These methods eliminate the variants to which are afferent lower values, in comparison with the standard levels;



- methods which settle the issue of relocation using the matrix of consequences and of some information upon the criteria, using the vector  $X=(x_0, x_1, \dots, x_5)$  where  $(x_0, x_1, \dots, x_5)$  is a permutation of the set of numbers  $\{1, 2, \dots, 5\}$ . The component  $x_i$  mentions the place where is found the criterion  $C_i$  depending on the preference;
- methods which allot certain cardinal preferences to the criteria. This means that the importance of the criteria, is given by the vector  $X = (x_0, x_1, \dots, x_5)$ , where  $0 \leq x_i \leq 1$ ;
- methods which bring the initial model to another form in which are taken into consideration only independent criteria [9][10][11]. From the multitude of the methods presented in Table 4, the issue of choosing the layout is framed into the group of methods, with information upon the criteria. These methods can be applied for finding an optimal variant, or for the ranking of the found variants. It was done a selection for the exemplification of the methods of scoring, which imposes the passing through the subsequent steps (Table 5):
- it is formed a matrix, in which are mentioned all the criteria of choosing the layout in each line and column;
- each criterion receives points of importance, taking into consideration that the score 2 is given for the most important criteria, score 1 is for those having the same importance and score 0 for the less important ones;
- the criteria are compared between them, two by two, taking into consideration the scoring mentioned above;
- on the diagonal of the matrix it is one point, since each criterion is compared with itself;
- it is calculated the total per column for each criterion obtaining the result  $n_i$  of the evaluation and the score is calculated in percentage  $P(n_i)$ .

**Table 4:** Methods for solving multi-attribute problems

Type of information	Complexity of information	Classes of methods
Without information		Method of dominance Maxi-min method Maxi-max method
	Standard level	Conjunctive method Disjunctive method
	Ordinal preferences	Lexical-graphic method Method of elimination based on aspects Permuting method
	Cardinal preferences	Linear attribution method Simple additive weighted method Hierarchical additive weighted method The method of diameters Onicescu method Electre method Topsis method Method of minimizing the deviation Saphier-Rusu method Scoring method
With information upon the criteria	Dependent criteria	The method of hierarchical combinations

**Table 5: Matrix of the interactions**

Criterion	C1	C2	C3	C4	C5	C6	C7	C8	C9	Total
C1	1	1	0	0	1	1	1	0	1	
C2	1	1	0	0	1	1	0	0	1	
C3	2	2	1	1	2	0	1	1	1	
C4	2	2	1	1	2	2	1	1	0	
C5	1	1	0	0	1	2	1	2	1	
C6	1	1	2	0	0	1	1	1	0	
C7	1	2	1	1	1	1	1	0	0	
C8	2	2	1	1	0	1	2	1	1	
C9	1	1	1	2	1	2	2	1	1	
$n_i$	12	13	7	6	9	11	10	7	6	81
$P(n_i)$ (%)	14.8	16.0	8.6	7.4	11.2	13.7	12.3	8.6	7.4	100.0

From the matrix of the interactions it is emphasized the second criterion as having an importance of 16%. Based on this result, the deciding person has the possibility to select the variant of layout, depending on the location which maximize the advantages of human resources. Such a method has negative aspects, determined by the fact that the decision will be adopted depending on the dominant criterion and involves a certain dose of subjectivism connected to the comparison of the criteria. For a more conclusive result, it can be chosen another method of Table 4. The approach is based on the appreciation of each criterion, by a parameter existent in the specialty literature, or configured by the decisional factor. For the understanding of the model were established the parameters and the intervals of variation in Table 6. For the settlement of the issue the following steps are passed:

- It is measured the level of the parameter for each variant of layout;
- The values are normalized if are used quantitative and qualitative criteria. The operation is performed based on correspondence between the set of the values of the criteria and another set using the procedure named scaling;
- The application of a method of Table 4 which leads to the selection of the variant of layout, depending on all the identified criteria.

**Table 6: Parameters associated with the criteria**

Symbol	Criterion	Parameter	Domain of variation
C1	Market	The distance up to the main customers (km.)	0-500
C2	Labour force	The availability of the labour force (%)	0-60
C3	Taxes	Fiscal deduction (%)	0-100
C4	Legislative system	Stability of the legislative system	0-10
C5	Infrastructure	The level of covering with utilities (%)	0-100
C6	Raw material	Expenses with raw materials (% of production cost)	0-80
C7	Utilities	The degree of covering with utilities (%)	0-100
C8	Research and Innovation	The degree of research and innovation (%)	0-20
C9	Natural environment	The level of pollution of the natural environment	0-10

## CONCLUSION

The problem of relocation of a company is approached in the literature of specialty, in close connection with a determinant criterion. Unlike this direction of research, the article presents, in a synthetic form, a decisional model which takes into consideration several objective criteria. The identified problem was treated as a multiple-attribute decision, having the advantage that

it offers a solution using a small consumption of resources. The main difficulty with whom the presented models of multiple-criteria decisions are facing, consists in the fact that they can lead to different solutions, for one and the same problem. Due to this fact in the final of the article, were enumerated the stages to be passed for the elimination of this drawback.

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# DEVELOPMENT OF 3D PRINTING RAW MATERIALS FROM PLASTIC WASTE

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**Abstract:** *Before 40 years, re-utilization of post-buyer bundling as glass containers and jugs was normal. There are restrictions to the excessive and extensive usage of inflexible compartment re-utilization, which are at any rate usually estimated. The dissemination and accumulation focus are generally far away from unified item filling manufacturing plants and would bring about impressive back-pull separations. Also, the extensive variety of compartments and packs for marking and promoting purposes makes coordinate reclaim and refilling less practical. Reclaim and refilling plans do exist in a few European nations (Institute for Local Self-Reliance 2002), including PET containers and also glass, however they are somewhere else for the most part considered a specialty movement for neighbourhood organizations as opposed to a sensible vast scale procedure to lessen bundling waste. (Saikia & de Brito, 2014). Plastic aggregates used in many studies, prepared from plastic waste, are obtained from different sources. As example plastic bottles were grinded in the laboratory by using a grinding machine and then sieved to get the suitable size fraction. (Frigione, 2010).*

**Keywords:** *3D printing, plastic, recycling, extrusion, filament.*

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## 1. INTRODUCTION

After studying the applied plastic recycling technologies, materials for 3D printing and the 3D printing technologies, it is realized that the quantity and quality of plastic waste differs from country to country and from company to other. In the case of waste plastics that are recyclable and reusable, the most widely used are polyethylene terephthalate (PET, used for synthetic fibres and water bottles), and second high-density polyethylene (HDPE, used for jugs, bottle caps, water pipes).

The current applications for using recycled plastics in fabrication and design are fairly limited, on a small scale, plastics (such as ABS, HDPE, or PET) are shredded and formed into pellets, and then either extruded into filament to be used in existing 3D printers, or injection moulded into small parts and pieces of larger components. At a large scale, recycled HDPE is melted into sheets and either used directly as sheets in construction, or then heat formed from a sheet into components for construction. These methods of fabrication using recycled plastics are the norm because of their affordability and straightforward processes, yet each method leaves some complexity to be desired. (Al-Salem, Lettieri, & Baeyens, 2009) recent progress in the recycling and recovery of PSW is reviewed. A special emphasis is paid on waste generated from polyolefinic sources, which makes up a great percentage of our daily single-life cycle plastic products. The four routes of PSW treatment are detailed and discussed covering primary (re-extrusion.

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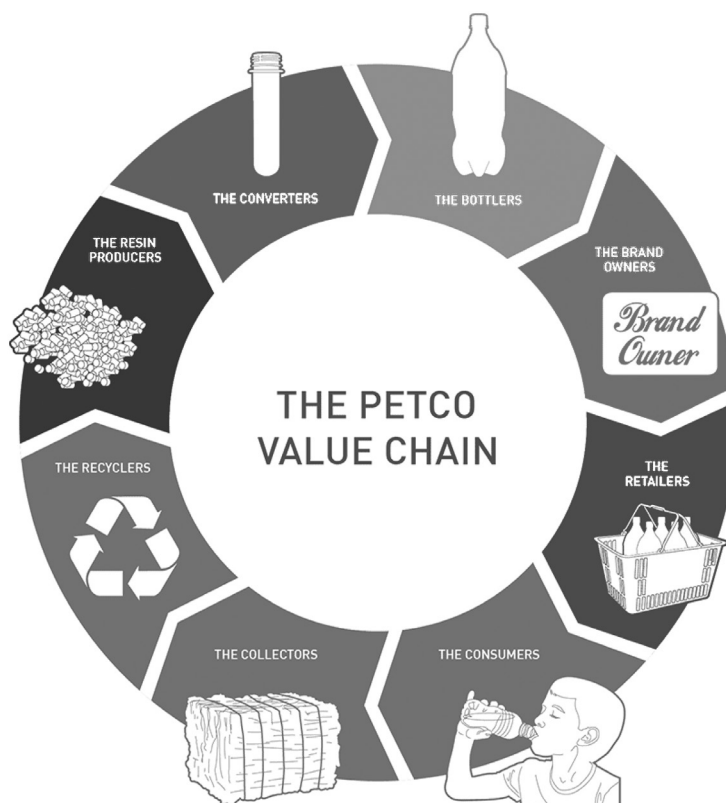
<sup>4</sup> FKF Nonprofit ZRT

Regarding the recycling technology, the previous methods of recycling and recovery routes for solid plastic waste are detailed and discussed covering:

- re-extrusion,
- mechanical treatment,
- chemical treatment,
- energy recovery.

Based on the previous research we performed on this field, the main objective of this paper is the contribution to the development of sustainable, effective technologies in the field of plastic recycling, both from the economic and ecological point of view.

Plastics recycling is complex and sometimes confusing because of the wide range of recycling technologies and recovery activities (Hopewell, Dvorak, & Kosior, 2009). These include four categories: mechanical reprocessing into a product with equivalent properties, secondary mechanical reprocessing into products requiring lower properties, and recovery of chemical constituents (Flores, 2008) and quaternary recovery of energy. Considering recycling technology, the work will be based on Polyethylene terephthalate PET and polylactic acid as mixed polymers PLA.



**Figure 1.** PET recycling circle

## 2. RECYCLING PET

The main production for PET is for the applicability of synthetic fibres (in excess of 60%) with bottle production accounting for around 30% of global demand. In terms of textile applications, PET is generally referred to as simply “polyester”. The terminology “PET” is used generally used for packaging applications. The polyester industry makes up about 18% of world polymer production and is third largest industry after polyethylene (PE) and polypropylene (PP). (Rahmani et al., 2013).

PET composes of polymerized units of the monomer ethylene terephthalate, with repeating  $C_{10}H_8O_4$  units. PET is recycled quite frequently and has the number “1” as its recycling symbol. The first PET was patented in 1941 by John Rex Winfield, James Tennant Dickson and their employer the Calico Printers’ Association of Manchester and the PET bottle was patented in 1973 by Nathaniel Wyeth. PET is also used as substrate in thin film and solar cell.(Bornak, 2013).

As, PET is an excellent barrier material, it is commonly used for producing plastic bottles; especially for the soft drinks. For some special bottles, the PET also sandwiches an additional polyvinyl alcohol for further reducing its oxygen permeability.

Bi-axially oriented PET film (often known by one of its trade names, “Mylar”) can be aluminized by evaporating a thin film of metal onto it to reduce its permeability, and to make it reflective and opaque (MPET). The above-mentioned properties hold applications in many domains like the flexible food packaging, thermal insulation for instance for the “space blankets “. Also, it has a high mechanical strength; the PET film is also commonly used in tape applications for example for the carrier of the magnetic tape or backing for the pressure sensitive adhesive tapes.(Welle, 2011).(Tafheem, Islam Rakib, Esharuhullah, Reduanul Alam, & Mashfiqul Islam, 2018).

The non-oriented PET sheet can undergo thermoforming and used to make packaging trays and blisters. If the crystallisable form of PET is used, it can be used to prepare frozen dinners as they have the capability to withstand the freezing and the oven baking temperatures. Filling these with glass particles or fibres makes them stiffer and durable. (Hopewell et al., 2009)

**Table 1** : End markets for PET recirculates in Europe and in the USA  
(Petcore, 2011; Napcor, 2011).

Year	Percentage fibre	Sheet	Bottle (food, non-food)	Strapping	Other
<b>2001</b>					
EU	62	16	7	10	5
USA	62.1	5.3	17.3	11.7	3.6
<b>2005</b>					
EU	57.0	16.2	15.2	7.8	3.8
USA	53.6	8.2	20.6	15.2	2.4
<b>2009</b>					
EU	40.5	27.0	22.0	7.0	3.5
USA	36.7	17.0	28.6	12.2	5.5

### 3. RECYCLING MIXED POLYMERS

Polylactic acid (PLA) and its systems PLA are one of the most vital biodegradable polyesters derived from renewable sources i.e. starch and sugar. Till the last decade, the main applications of PLA were limited to biomedical and pharmaceutical applications such as implant devices,



tissue scaffolds, and internal sutures due to its high cost and low molecular weight. Since, the existence of both hydroxyl and a carboxyl group in lactic acid allows it to be converted directly into polyesters via a polycondensation reaction; a considerable amount of interest has been paid to the academic research associated with PLA polymer and its copolymers (3e5). Although PLA is a biodegradable material, which would significantly reduce environmental pollution associated with its waste, the knowledge behind this material recycling and changes in the properties of PLA upon its multiple processing is a very important subject of discussion.(Wasan Ismail Khalil & Khalaf Jumaa Khalaf, 2017).

Polyvinyl chloride (PVC) and its systems along with the low cost and high performance of PVC products combined together with its wide range of properties that can be obtained from different formulations has contributed to the widespread use of PVC in construction products. There has been a long time-lag between PVC consumption and the amassing of PVC waste arising from the long life of PVC products, which can be up to 50 years. It is quite clear that all produced PVC will eventually become waste in a few days' time. The European Association of Plastics Converters (EuPC) has estimated that the PVC waste for the periods between 2010 and 2020 will arise from the following sources. Many works have documented the recycling of PVC and its systems since the beginning of the last decade.(Kou et al., 2009).

Polyethylene's PE's are one of the most widely used plastics characterized by a density in the range 0.918e0.965 g/cm<sup>3</sup> resulting in a range of toughness and flexibility. Their major application is in packaging film although their outstanding dielectric properties. Chemical recycling of PLA/PE and PLA/PBS blends.

#### 4. RECYCLING TECHNOLOGIES

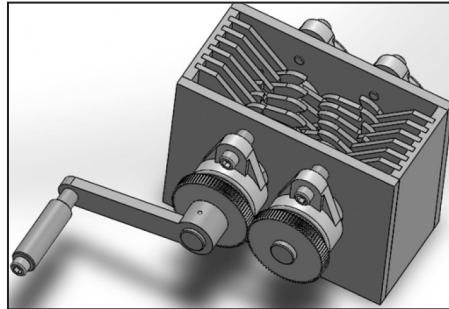
Recent research points the way towards chemical recycling methods with lower energy requirements, compatibilization of mixed plastic wastes to avoid the need for sorting, and expanding recycling technologies to traditionally non-recyclable polymers.

We mentioned the recycling technologies from which we concluded that mechanical recycling is the only widely adopted technology for large-scale treatment of plastic solid waste. The main steps were the removal of organic residue through washing, followed by shredding, melting, and remoulding of the polymer, which is often blended with virgin plastic of the same type to produce a material with suitable properties for manufacturing.

There are limitations to mechanical recycling technologies because each type of plastic responds differently to the process depending on its chemical makeup, mechanical behaviour, and thermal properties. Temperature-sensitive plastics, composites, and plastics that do not flow at elevated temperatures (as in the case of thermosets) cannot be processed mechanically. Consequently, only two types of plastic are recovered and recycled with mechanical processes: poly (ethylene terephthalate) (PET) and polyethylene, which represent 9 and 37% of the annual plastic produced, respectively. All other plastic solid waste is either not recovered or in amounts representing less than 1% of production. According to the most recent U.S. Environmental Protection Agency report, a mere 8.8% of all plastic produced in the U.S. annually is recovered from municipal solid waste and then incinerated, recycled, or industrially composted. The recycling rate is slightly higher in Europe, at ~30% for plastic waste.

In our previous research supervised by Dr Zoltán Bártfai, we found solution for grinding and extruding plastic using machines with two different parts: crusher, extruder and mixed it together.

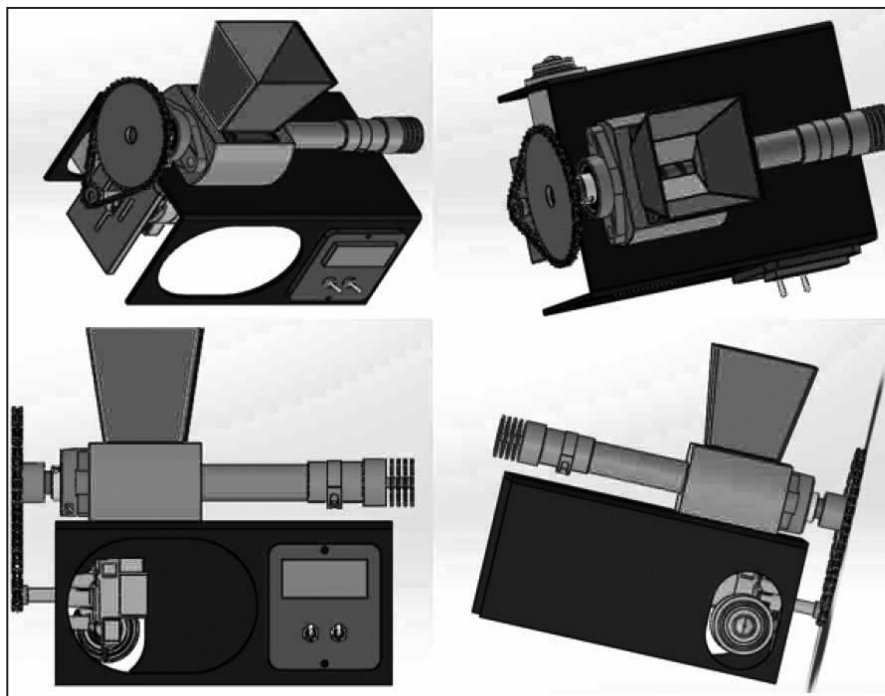
The crusher consisted of 12 blades twelve anvil-blades, right axis, left axis, cover, sieve, fourteen casing spacers, four nuts, two pins and crank. (Oussai, Zoltan, & Laszlo, 2018).



**Figure 2.** overview of the complete design of the crusher

The extruder consisted of: hopper, room of extrusion, heating collar, chain transmission, nozzle, engine support, engine, control panel and the extruder support. The component which was most important in the extruder was the extrusion screw that acts like a screw pump, fits in the room.

The function of the screw was to move the pieces of plastic inserted through the hopper along the length of the room.



**Figure 3.** Overview of the complete design of the extruder

Current technologies that move beyond mechanical recycling include pyrolysis (thermolysis) to selectively produce gases, fuels, or waxes through the use of catalysts; are referred to as chemical recycling. Chemical recycling is not a widespread recycling practice, mainly because of energy costs. A further option is the incineration of materials and collection of energy in the

form of heat. Incineration is convenient for the treatment of mixed waste because it avoids the need for sorting, but it does not allow for the recovery and reuse of the starting components once burned. It also does not save as much energy as recycling.

## 5. CONCLUSION

The environmental consequences of plastic solid waste are visible in the ever-increasing levels of global plastic pollution both on land and in the oceans. But, although there are important economic and environmental incentives for plastics recycling, end-of-life treatment options for plastic solid waste are in practice quite limited. Pre-sorting of plastics before recycling is costly and time-intensive, recycling requires large amounts of energy and often leads to low-quality polymers, and current technologies cannot be applied to many polymeric materials. In the current scenario there is growing demand and interest towards chemical recycling methods with low energy demand along with compatibility of mixed plastic waste to overcome the need for sorting and expanding the recycling technologies to traditional non-recyclable polymers.

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# SHARING ECONOMY IN THE CZECH REPUBLIC: CASE OF PRAGUE\*

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**Abstract:** *This paper analyzes the sector of the sharing economy in the Czech Republic using unique data from relevant sharing economy platforms. Potential increase in efficiency on markets using sharing economy platforms is demonstrated on transportation market in Prague using unique in terrain approach. First step towards more suitable legal framework is to clearly define the line between participants in sharing economy and regular entrepreneurs; set less restrictive rules for participants in sharing economy, deregulate the business environment and make compliance with legal system as simple as possible.*

**Keywords:** *Sharing Economy, regulation, bureaucracy, taxes.*

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## 1. INTRODUCTION

Generally valid and recognized definition of a sharing economy does not exist at the state level, let alone internationally. Experts around the world have yet to agree on how to define this phenomenon. For purposes of this paper definition of European Commission is used. European Commission described the functioning of the sharing economy in its study [1]. A valuable output of the study is the categorization of participants in the sharing economy into the intermediary body, provider and user.

As we have defined in [1], [2] the intermediate body is a key element of the current model of sharing economy. Intermediate body is the part of the chain of sharing mediates communication between supply and demand on the market. Intermediate body connects consumers on demand side on the market with providers on the supply side of the market. Intermediate body must have enough economic goods to share. Intermediate body also must provide a simple, clear and secure way of communication between the different users within the model and it must ensure that the contracts are adhered to and thus prevent fraudulent behavior. [1]

Lack of generally accepted definition causes problems. In practice, there are many situations where it is not clear whether sharing is involved or if the activity is just regular business activity. The logical question arises. Which rules set in the parallel business sector and to what extent must be respected within the sharing economy? Potential non-compliance with certain rules sets for traditional sectors at the sharing economy platforms may result in a serious threat to security and a disruption of the current framework of citizen protection - especially consumer and employee protection, tax collection and fair market conditions. Therefore, an optimal form of the legislative system is needed to enable the benefits of sharing services in and outside the transport sector to be maximized while minimizing possible negative impacts.

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## **2. BENEFITS, POSITIVES AND CHALLENGES OF THE SHARING ECONOMY ECOSYSTEM**

Theoretical background behind research of our scientific group further describes potential benefits, positives and challenges of the sharing economy ecosystem. [1], [2], [3], [4], [5] As main potential benefits and positives of sharing economy ecosystem were identified:

- Expansion of the supply of economic goods,
- Simplification of access to economic goods,
- Reduction of transaction costs and thus prices of economic goods,
- Extension of available options of increasing income,
- Participation of users in the ecosystem,
- Environment.

While as potential challenges of the sharing economy ecosystem were identified:

- Threat to equality of conditions on the market,
- Participants in sharing economy avoiding tax and other legal obligations,
- Breach of the existing framework for the protection of citizens (consumer and employee protection),
- Ensuring compliance of applicable legal standards and other rules by users of shared assets.

Abovementioned benefits, positives and challenges are connected to nature of sharing economy ecosystem which can be above all described as fast, new, flexible and efficient system in terms of connecting market participants together. The above-mentioned extension of the supply of economic goods and market access simplification reduces transaction costs for all market participants. In addition to that, sharing economy platforms increase the competitive pressures on the market, which, according to neoclassical economic theory, reduce prices. [6] More efficient use of already produced and often idle resources that sharing economy platforms allow reduces the need to produce brand new goods which has positive impact on the environment. [7]

## **3. HIGHER EFFICIENCY IN PERSONAL TRANSPORTATION: CASE OF PRAGUE**

Sharing economy platforms in personal transportation in Prague is a very interesting regulatory laboratory. This chapter focuses on pragmatic side of sharing economy.

Prague is, unfortunately, an example rather negative. Therefore, the text seeks to capture the problematic situations associated with the operation of personal transport in Prague and on the basis of best practices from abroad, thus helping to set up a problem-free system that maximizes the possible benefits of sharing economy platforms operating in personal transport and minimizes any potential negative impacts.

Traffic in Prague is a living organism. Taxi transport and transport through sharing economy platforms have differences. Both types of personal transportation make a significant contribution to the sustainability of urban transport. Both groups fall into category door to door transport that can be used by people with special needs or specific preferences. Transport in this way greatly reduces the need to use own car for transportation to or in the city, thus limiting the need to park the car. Analyses [8], [9] show that sharing economy platform Uber is 30 % more

efficient than standard taxi in terms of occupancy and mileage and hundreds of percent more efficient than standard transportation system with single driver using car for commute.

The following documents must be obtained to be legally allowed to provide taxi services: ID of the taxi driver, trade license, trade license related to the registration at the financial office, the health insurance company and the Czech Social Security Administration, and a special concession. In addition to all that, the taxi car must be visibly identified and equipped with one of the officially accepted taximeters. Beyond these tasks, the applicant must complete the test from the topography of the capital city of Prague.

**Table 1:** Tasks necessary to become a taxi driver in Prague

Task	Time (h)	Fees (EUR)
Initial study of the environment.	5	
Phone calls with municipal authorities.	2	
Taxi drivers license request and journey to the place of permanent residence. (2x)	8	16
Photographs necessary for issuing a license taken elsewhere.	1	5
Request for trade certificate and request for concession. 3 visits.	4	40
Communication with financial office, social security office and health insurance office.	3	5
Study time for topography test	17	

Obtaining these documents requires visiting a number of public offices. Some of those need to be visited personally and several times. It takes hours of time to transport, hours necessary for search for information, and standing in queues. Moreover, the waiting periods of the documents are interwoven. Passing through the process lasts about 5 months, and mandatory activities combined take about 40 hours. Fees combined climb up to 70 EUR. [9]

It is no surprise that the digital platform like Uber has attracted so much attention. In the year 2018, 2,000 drivers used the Uber application and its service in Prague was used by 300,000 people. [10] Simplicity of the application and connection to the process from both the customer's position and the driver's position has made the application a popular tool. Shared platforms have extended the offer of this type of transport to formerly unpopular locations which increased the availability of such service, making it easier for the transport system in Prague to meet customer needs.

This, of course, has raised a wave of protests and complaints from classic taxi drivers who feel cheated. Sharing economy platforms such as Uber, Liftago, Taxify and others provide similar service to the service provided by classic taxis. But taxi drivers must go through the aforementioned process, which carries a lot of costs. Taxi service is in the second paragraph of Act No. 111/1994 Coll. defined as „... passenger transport for customer needs which includes the carriage of persons, including their luggage, by vehicles intended for the carriage of not more than 9 persons, including the driver. Taxi service doesn't include a regular passenger service, an international shuttle service or occasional road passenger transport.” Taxis are therefore a business activity, which creates a relationship between the operator and the transported person.

However, platform representatives claim that they are not a classic taxi and they position themselves rather as a contractual transport. On such a „contract” drivers, the law requires different obligations than on a regular taxi. One of the conditions, however, is the need to agree with the customer on the price before the actual journey. They are not allowed to take customers on

the street like a classic taxi, they can't stand on a taxi stall or ride in lanes reserved for public transportation and taxi only. Sharing economy platforms in Prague mostly fit into this category. By moving on the edge of the law, this type of service gets into the gray zone, which is not optimal for legal certainty not only in the field of transport. The situation is discussed at courts in Prague, Brno, but also in London and elsewhere in the world.

Ministry of finance of the Czech Republic [11] sides with the opinion that sharing economy platforms such as Uber do provide taxi service, which means that they should follow all the rules and obligations set for standard taxi services.

However, it is clear on the example of Prague that this is an excessive regulation that doesn't really help. Hours of time, waiting months, yellow cars, taximeter, metering at a special location, and resulting service does not get higher quality. On the contrary. Taxi service in Prague had one of the worst reputations in the world.

Uber is much simpler. Drivers have to register at the platform and obtain a standard business license. Consumers choice is clear. Consumers familiar with the environment voluntarily chose sharing economy platforms with all mentioned benefits and threats over traditional taxis. Unnecessary regulation of sharing economy platforms may dismiss the positive effect of new business models that solve various legal problems.

#### 4. SUGGESTIONS

Sharing economy helps the traditional economy, society and ecology. [1], [2], [3], [4], [5] The question is: How to set the rules so that the society really benefits from sharing economy with fair respect for both small and big businesses?

- Set a threshold that will divide participants in sharing economy into traditional entrepreneurs and participants who genuinely share. Set less restrictive rules for people that do not exceed set threshold;
  - Participants in sharing economy that do not exceed certain revenue (e.g. three times minimal wage) shouldn't be required to fulfill all duties that standard businesses have. This will motivate participants to follow rules in simplified legislative framework as these rules will not be prohibitive (examples from transportation and short-term rentals described earlier in the text). Consumers should be notified and potential risks coming from buying goods or services from non-professionals should be explained.
- Clear definition of traditional entrepreneurs and those who genuinely share and enforce all rules;
  - Clear definition of rules for individual subjects in sharing economy and enforcing them is necessary to achieve compliance with all the rules which will help to increase transparency in tax related issues and to maintain current level of consumer protection.
- Deregulation;
  - Equal conditions on markets for all entrepreneurs should be reached by deregulation rather than adding more excessive regulation. If unequal conditions on market arising from laws or regulations that are only enforced on one group of market participants are identified, option of deregulation should be considered first.
- Simplification of legal system;
  - Compliance with systems, legal or other, is significantly affected by difficulty of meeting set obligations. Simple systems with user friendly interface that allows meeting all

obligations at one place generally achieve higher rate of compliance than complicated non digitalized systems. If there are necessary e.g. inspections that are reasonable in many cases, they should be done and paid for at once. This is not just the case of sharing economy but case of whole business environment in the Czech Republic.

## 5. CONCLUSION

This paper summarizes possible benefits and challenges that are accompanied with emergence of sharing economy platforms. Together with the positive effects of a sharing economy, it is necessary to face many challenges that the disruptive nature of sharing economy platforms create to society. Key challenges have been identified: maintaining standards of consumers protection and security, eliminating tax evasion and other legal obligations, and ensuring fair and equal business environment. Consumer protection may be jeopardized by non-compliance with standards of standard markets. However, this can also happen when dealing with traditional entrepreneurs. The same applies for the risk of tax evasion. [12] Ensuring equal and fair market conditions for all participants is the biggest challenge. An environment where two entrepreneurs run an identical service, but only one of them complies with the applicable laws that are accompanied with costs is not a sign of equal and fair business environment. This situation must not occur on a fair and efficient market.

Some obligations and regulations in personal transportation and short-term rentals are excessive and ineffective. Two described cases (transportation and short-term rentals in Prague) show that sharing economy helps identify excessive regulation and offers more efficient way of achieving goals that current legislative system was designed to solve.

Text of the paper offers 4 suggestions on how to get rid of excessive regulations. These suggestions include: clear definition of those who are regular entrepreneurs in sharing economy environment by setting a threshold that draws line between regular entrepreneurs and genuine participants in sharing, setting less prohibitive rules for those who do not exceed this limit, deregulation of business environment in the Czech Republic and simplification of processes necessary to meet obligations set by legal framework. Following these suggestions would improve situation regarding sharing economy in the Czech Republic by addressing the most pressing issues that are: tax evasion, consumer protection and implementation of positive aspects of sharing economy platforms into traditional economy and current legal framework.

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# SOME ASPECTS OF THE DISCRIMINATION OF MIGRANTS IN LABOR RELATIONS

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**Abstract:** *Discrimination as a global phenomenon is becoming more and more present in all areas of social life. It is a phenomenon that is relatively difficult to define and more difficult to quantify. On the other hand, the labor relations have dominant importance for quality existence of the citizens and the society as a whole. Moreover, when the aforementioned aspects are considering and analyze through the prism of migration, we face with greater challenge.*

*In this sense, the paper will be focused on studying and analyzing the most important aspects of discrimination of migrants in labor relations. Thus, an overview of the notion and the legal framework of discrimination will be given first. At the same time, the concept of free access to the labor market will be processed, in order to determine the selective approach of the companies in the employment process. At the same time, the lack of intercultural knowledge by the employers will be emphasized, with a special focus on comparing experiences from several countries. In this context, the situation with migration will be positioned worldwide.*

*The paper will give a concrete contribution to clarifying the future of the EU's economic migration policy, which will need to be well based on the new reality of the regional and global context of the labor market. The calls for new approaches to the labor market policies that consider cross-border mobility, promotes more inclusive employment, increases productivity and labor market participation among all working-age groups, as well as enhances the contribution of migration for growth and competitiveness of the global economy.*

**Keywords:** *discrimination, migrants, labor relations.*

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## 1. INTRODUCTION

Human rights contained in international and regional instruments have inevitably succeeded in affecting all areas in the process of making important decisions and migration is no exception. However, migrants continue to be disproportionally affected by human rights violations. Mainly, this is a consequence of their status as non-nationals of the country they live, but this may also be a result of their frequent risky trips, during and after their return to their home county.

Contrary to general assumptions, migrants who are documented are not immune to the abuse of their human rights, but migrants who are in irregular situations are generally subject to a higher level of vulnerability, while encountering major obstacles to access the protection of which they have right to. Therefore, it is of particular importance to emphasize that human rights apply to all migrants, regardless of their migration status.

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Migration is a complex and politically sensitive subject that is difficult to define and measure. In Europe, there is an increase of migration, as well as significant changes in terms of the model and the type of migration. Such changes are very likely to continue. The reasons for migration are diverse and difficult to sort. Migration is a major factor for population change and it is essential for the structure of the labor market.

At the same time, migration is a global phenomenon that has an impact on the lives of the majority of people. About 258 million people are qualified as international migrants and in our ever-growing interconnected world, millions more are affected by family ties, economical exchanges and cultural ties. Migration, among other things, is a powerful driver for sustainable development for the migrants themselves and their communities in the country of origin, transit and destination.

Migrants partake about 3 percent of the world's population, but they actually generate more than 9 percent of the global GDP.

They often create meaningful benefits for their new communities, in form of skills, labor strength, investment and cultural diversity. Additionally, migrants play a role in improving the lives of communities in their countries of origin, through the transfer of skills and financial resources, which contribute to better development outcomes.

However, if migration is inadequately managed, it may have a negative impact on the development, with migrants being at risk and the communities would face too many problems and pressures.

In some cases, discriminatory trends have recently deteriorated from hostile political discourse, which hasn't overlooked the possibility of risk of rejection and expulsion of migrant workers.

Hence, there is a need for quick and comprehensive responses to the emerging trends that can harm ongoing and future efforts in securing an equal opportunity for employment. With growing economic uncertainty for the entire population, minorities and foreigners or foreign workers risk becoming scapegoats.

## **2. LEGAL FRAMEWORK OF DISCRIMINATION**

Discrimination stems from prejudices and stereotypes that are developed most often by the majority. It is an unequal treatment, that is, making differences between people, either positive or negative, and based on certain personal characteristics, that is, discriminatory basis, which leads to exclusion, limitation or giving priority to a particular person/group.

According to the definition of the European Court of Human Rights, the basis for discrimination is "a personal characteristic (status) according to which persons or groups of persons differ from one another."

Despite the enormous progress at the international level in strengthening the legal protection of individuals and groups of persons against discrimination, reports from several parts of the world confirm that discriminatory acts and practices are everything but a memory from the past.

Following the ban on discrimination based on race, sex, language and religion in the Charter of the United Nations, the adoption of the *Universal Declaration of Human Rights* [1], together

with the *Convention on the Prevention and Punishment of the Crime of Genocide in 1948* [2], became the next important step in the legal consolidation of the principle of equality before the law and the emergence of a ban on discrimination.

Article 1 of the Universal Declaration proclaims that: „All human beings are born free and equal in dignity and rights”, while under Article 2: „Everyone has the right to all the rights and freedoms set forth in this Declaration, regardless of the kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.”

Regarding the right to equality, Article 7 of the Universal Declaration provides that: „Everyone is equal before the law and is entitled without any discrimination for equal protection of the law. Everyone has the right to equal protection against any discrimination contrary to this Declaration and against any incitement to such discrimination.”

*The European Convention on Human Rights* [3] differs from other general human rights treaties by not having an independent prohibition of discrimination, but only a prohibition related to the enjoyment of the rights and freedoms guaranteed by the Convention and its protocols. This means that allegations of discrimination that are not related to the achievement of these rights and freedoms do not fall within the competence of the European Court of Human Rights. Article 14 reads as follows: „The enjoyment of the rights and freedoms set forth in this Convention shall be provided without discrimination on any ground such as sex, race, color, language, religion, political or other opinion, national or social origin, affiliation with a national minority, property, birth or other status.”

It is interesting to note that the prohibition of discrimination in Article 14 includes „association with a national minority”, which cannot be construed as *expressis verbis* in Articles 2 (1) and 26 of the *International Covenant on Civil and Political Rights*, Article 1 of the *American the Convention on Human Rights* or Article 2 of the *African Charter on Human and Peoples' Rights*. However, the last provision, as seen above, uses the term „ethnic group”, which has a more limited range of „minority”.

However, the member states of the Council of Europe have taken important steps to overcome the above-mentioned mistakes in the Convention: on 4 November 2000, the fiftieth anniversary of the adoption of the Convention, they adopted *Protocol No. 12* to the European Convention containing a general prohibition of discrimination.

„Within the ILO, as a specialized UN agency, the principle of equality and the prohibition of discrimination is provided for in the *Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families* and the *Convention against Discrimination in the Field of Employment and Labor Engagement* since 1958. In accordance with the second, any form of different treatment, exclusion or privileged treatment based on race, color, sex, religion, political opinion, national or social origin, which aims to disrupt the equal opportunity or treatment in employment relationship or work engagement. However, unequal treatment regarding specific work based on certain employment conditions will not be treated as discrimination. Also, these principles are provided in the *Equal Remuneration Convention*, which provides equal compensation for the male and the female workers based on identical standards, without any gender discrimination. Within the ILO, the *Convention on Vocational Rehabilitation and Employment of Persons with Disabilities* was adopted in 1983, which provides equal treatment of persons with disabilities and the introduction of affirmative measures in accordance with which will enable effective equal treatment and which will not constitute discrimination versus other workers.” [4]

### 3. FREE ACCESS TO THE LABOR MARKET

“The lack of labor and skills [5] is expected to increase in the EU in the short and medium term as a result of demographic trends in labor reductions and structural changes in the distribution of occupations and the nature of skills in demand caused by a competitive global economic environment. After decades of growth, the decline in the working-age population in the EU began in 2013, according to Eurostat’s demographic projections, which indicate a loss of over 2.5 million in the EU’s working-age population in the decade 2010-2020 and a fourfold higher decline in the next decade. This will result in a 12 percent reduction in the working-age population in the EU by 2030. Concerning the composition of the skills of the EU workforce, there has been a significant increase in the past decades, largely due to the higher education of new entrants in the workforce compared to pensioners. However, a recent OECD analysis of the demography of education suggests that in the period 2010-2020, the share of highly educated workers among older retired cohorts will be significantly higher than in previous decades, leading to a much slower increase in the size of highly skilled workforce.” [6]

In most EU Member States, labor migration systems are predominantly driven by demand, that is, the migration of workers from third countries is approved in response to the existence of a shortage of labor, which can be identified in various ways, among which the most common are labor market tests and weakness lists. As a general rule, in demand-based schemes, migrant workers are not allowed entry into the country without a job offer. On the other hand, workers who are ready to fill such deficiencies, and who cannot meet them by engaging a citizen or workforce of the EU, are expected to hire an employee who still lives abroad. These labor migration systems suggest that the employment contest between employers and employees would generally occur without a prior meeting between the concerned stakeholders. In this context, access to labor market information for employers and future migrants is crucial if international migration plays a role in responding to a lack of labor and skills.

### 4. DISCRIMINATION AND LACK OF INTERCULTURAL KNOWLEDGE – COMPARATIVE APPROACH

The lack of intercultural knowledge by employers can also lead to a relative weakness for migrants compared to natives in the recruitment process. Due to resource constraints and limited experience in the employment of people from abroad, SMEs appear to lack capacity (in terms of counseling and training) to address issues related to cultural diversity in the employment process. Certain behavior or dressing patterns during an interview, for example, if it is not fully in line with the country’s standard practices, can be considered unprofessional. In addition, the cultural attitudes and preferences of the candidate for migration can be considered as a potential risk in terms of good interpersonal relationships with potential future colleagues and the cohesion of the work team. As a consequence, even when explicit discrimination against migrants is not in sight, implicit stereotypes and intercultural barriers can contribute to unfairness in the employment process, affecting the positivity of migrant employment results compared to natives with the same levels of qualifications and competencies.

The study on *Germany* showed that despite the introduction of the wider anti-discrimination law in 2006, discriminatory behavior against ethnic minorities still plays a role in disabling migrants’ access to jobs at the same level as indigenous people. Findings of recent study trials for student internship applications have been noted [7], suggesting that if all other things are equal,

candidates with a Turkish-sounding name, on average 14 percent, are less likely to receive an invitation for job interview than applicants who have a German-sounding name. This difference in rates of returns on call has been shown to be even greater in small and medium enterprises - 24 percent.

In spite of this, and in accordance with the public debate after the announcement of these results, the Federal Anti-Discrimination Agency launched an experiment with anonymous applications for work in Germany to examine their potential in the fight against discrimination in employment. This initiative was inspired by field experiments in other European countries, such as France, Sweden and the Netherlands.

The results of the German experiment are encouraging, since anonymous applications for work really seem to reduce discrimination in employment. Anonymous job applications can be practically implemented without excessive costs and lead to equal opportunities for minority groups of candidates - at least in the initial phase of the recruitment process. However, in the more advanced stages of the employment process - and, in particular, in the job interview - implicit discrimination and stereotyping [8] and taking into account cultural diversity can still result in a relative disadvantage for applicants of migrant background.

In *Sweden*, according to the Discrimination Law, which came into force in 2009, employers with 25 or more employees must have a plan of action against discrimination and conduct a payroll audit every 3 years. They can turn to the Ombudsman for Equality for guidance on how to comply with the law, and they are also offered the opportunity to participate in courses (such measures should be extended to smaller firms). A good practice that is in favor of improving awareness in the application of diversity in employment in Sweden consists of network meetings organized by the Ombudsman with trade unions and representatives of employers' associations. Lawyers and experts from this area are invited to participate, whose goal is to exchange experiences from work in cases of discrimination and to effective measures. [9]

*Canada* has an increasingly ethnically diverse population, due to the high levels of permanent migration. Given national concern over the decline in labor growth and the lack of some skilled professions, Canada's immigration policy is oriented towards attracting highly educated workers. How do economic migrants get information about job opportunities in their country of destination? What information on the labor market is available to employers who want to meet their work needs with migrant workers? These are crucial issues to respond to the implementation of the migration policy. The advantages of migration are numerous and, given the legal and informational barriers inherent in migrating abroad for employment, immigration systems that direct these processes and provide information to employers and migrant workers are of paramount importance.

Key features of the Canadian labor market include significant regional differences in employment opportunities through occupation and a reduction in workforce growth. The older workforce has several obvious implications for the future: greater pressure on Canadian health care, more pressure on public pensions, and most importantly more pressure on firms that sometimes struggle to meet the needs of new entrants and skilled workers. Indeed, the slower growth of the population and the older workforce means that many Canadian businesses must attract more workers capable of filling their needs from abroad.

These two trends are accompanied by significant regional wage differences, large differences in production composition in 10 provinces in Canada and a steady urban-rural pay gap. Reducing population growth also means that, according to most estimates, migration will be responsible for the overall growth of Canada's net workforce in the coming years. [10]

The barriers to employment faced by migrants in Canada are more fundamental than the informative ones. The most common difficulties reported by migrants are the recognition of foreign experience, education and qualifications and language barriers. These factors make a greater contribution to any gaps in labor market outcomes for migrants than to difficulties in accessing information on the labor market. Additionally, an information barrier has been identified as an important factor: workers born overseas often have difficulty finding out about job opportunities in their area due to lack of personal contacts. [11]

## 5. CONCLUSION

Removing discrimination as a contributor to layoffs is very difficult. Migrant workers are concentrated in sectors sensitive to the business cycle, often with temporary or insecure work contracts and, during an economic crisis, employment rates are declining rapidly in these sectors.

Paraphrasing *Cholewinski*, the feminization of migrant workforce and increased reliance on countries on temporary workers are not adequately reflected in ILO or ICMW instruments.

Another major obstacle is the chronic reluctance of states to comply with legally binding, multi-lateral instruments that regulate international labor migration and the protection of the rights of migrant workers. At the same time, it is obvious that the overstaffing of employers over workers remains a problem. The growth of irregular migration is not general, but limited to specific constraints, with the United States forming a large part of them.

In the short term, instead of the new standards, genius could best invest in aligning the road to regional and national adoption and implementation of existing standards and capacity building in trade unions and enterprises.

Greater and closer cooperation could help in the adoption of standards and in the continuation of their implementation. This should include cooperation between countries of origin and destination countries, and in particular between competing economies.

Setting up human rights standards is an important activity in itself. In addition, we urgently need a better, empirically grounded understanding of their effects. This can only be obtained with significant data and appropriate statistical techniques. Introduction of standards or their implementation should be the subject of studies. Academic research literature in recent years produces many useful insights into the processes of discrimination.

In this context, the future of the EU's economic migration policy should be well based on the new reality of the regional and global context of the labor market. This calls for new approaches to labor market policies that take into account cross-border mobility, promotes more inclusive employment, increases productivity and labor market participation among all working-age groups, and enhances the contribution of migration to growth and competitiveness.



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# ANALYSIS OF INCOME COMPOSITION, ASSET QUALITY AND PROFITABILITY OF INDIAN COMMERCIAL BANKS

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**Abstract:** *Commercial banks are traditional financial institutions accepting deposits and lending whereby maintaining financial stability. Stability of the banking system and viability of banks is considered to be of principal significance growth of the economy. The shifting landscape of financial system has brought transition in the businesses of the banks along with rise in stressed asset levels. Quality of assets of bank directly affect the income, expense and balance sheet of the banks. The paper attempts to investigate the change in the income composition of banks further it also examines the change in the asset quality of banks over a period of 10 years. The research also aims to review the relationship between the asset quality and profitability of banks. Using a sample of public and private banks from India, a panel regression analysis affirmed the interrelationship between income, asset quality and earnings which indicates banks focus on nontraditional income has improved the quality of earnings, however higher credit to deposit ratio has declined the asset quality over the time span. Lower asset quality lead to lower return on assets and return on equity which confirms to the study by Lown and Friedman (1991) lower asset quality in economies defer economic recovery by decreasing operating profit margin and eroding capital base for new loans.*

**Keywords:** *Financial Stability, Asset Quality, Return on Asset, Income, Balance Sheet.*

## 1. INTRODUCTION

A well-developed financial intermediation is characterized by the stability in its banking system channelizing surplus funds into savings for investment in productive activities leading to economic prosperity (King and Leven, 1993). Banks have been a fundamental participant in the financial intermediation process and financial stability through creation of loan assets; conversely, these loan assets exposed banks to numerous risk and liquidity restraints disturbing the profitability of banks and financial stability of the economy. Banks have come out of their customary role and ventured into new business practices for augmenting their margins at lower risks. Banking sector is a developed market tightly regulated and stable though it has become more competitive post liberalization as banks undertook risky behavior resulting into bank failures and financial crisis. Over the years multiple financial reforms have been initiated however these reforms resulted in extraordinary alterations in market structure, ownership patterns and financial operations of Indian commercial banks (Tzeremes (2015)). The growing competitiveness among the various banking groups compelled banks to move away from traditional activities and to adhere the non-traditional banking activities. Banking literature indicates how transitions in the business have resulted in higher risk. Majority of literature supports that assortment of business is essential in a competitive environment, however some studies claim that increased risk behavior and deterioration in the asset quality is an aftermath of the com-

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petition and change in business practices. Narashimham committee recommended the concept of Universal banking which encouraged banks to undertake both commercial and investment activities. While the existing work discusses on the income diversification and asset quality, this paper examines how composition of income affect the asset quality and profitability of the banks whereby enhancing return to the shareholders.

## **2. LITERATURE REVIEW**

### **2.1. Income Diversification**

Generally, it is anticipated that rise in the share of the non-interest income of banks decreases the volatility in the profit margins as these incomes are not directly linked to the business environment. Study by (Demstet and Strahan 1997) and (Stiroh 2004) depicts doubt on the steadiness of profits and risk minimization of the banks through non-interest income similar studies can be conducted in Indian context to understand the underlying theory. When transition in the income composition takes place from interest income to non-interest income-based activities banks have to scale up their technology investments, hire skilled manpower, build additional capacity and increased capital expenditures. The effect of income diversification will vary across banks based on the product mix and ownership structure (Merecia et. al. 2007; Meslier et. al. 2014). Literature indicates two separate thoughts on the effect of income diversification, one where economies of scale and managerial competency are reactive factors of income diversification in banks, (Sanya and Wolfe 2011) contrary thought indicates that income diversification may dilute the comparative advantage of management increasing the volatility of profits. The financials of the banks indicate that change in the income composition by expanding businesses into non-traditional activities such as fees, commission and brokerage charges have enhanced the profits and the risk adjusted profits of the commercial banks over the decades. Private sector banks have scaled up the non-interest income through multiplicity of products and services offerings as compared to the public sector banks since liberalization. (Nguyen 2012) study enumerates no clear evidence of negative association between non-interest income and banks interest margins, however the study by (Lin et. al. 2012) establishes interest margin shocks can be mitigated by non interest incomes. Non-traditional incomes of banks have shorter earning span as the switch over costs are low thus the challenge is in retaining the customer base (De Young and Roland 2001). In the Indian context limited studies can be found exploring the interlinkage between income diversification and profitability of banks. Studies indicate that there exists a tradeoff between soundness and profitability of Indian banks as non-performing assets erode the profits of the banks (Banerjee and Velamuri 2015). Study by (Pennathur et. al. 2012) depict that non-interest income has an impact on the profitability and risk measures of the banks. It was found that private sector banks had more income diversification as compared to the public sector banks which were reflective in the profits of the banks. Thus, the study tries to explore the income diversification in the Indian public and private sector banks and its effect on the profits and risk measures.

### **2.2. Asset Quality and Risk**

Traditional understanding enumerates shift from interest to non-interest income results in risk minimization improving the risk return trade off (Stiroh 2004). There are conflicting predictions on the existing theories on banks engagement in non-traditional activities, some studies favor that fewer regulatory restrictions permit banks to take advantage of the economies of scale (Claessens and Klingebiel, 2001), whereas few studies comprehend that banks engaging in too

many activities may lead to complex structures difficult to monitor and may lead to conflicting interests (Boyd et al., 1998). Global financial crisis had highlighted the issue of income diversification and bank risk. (Brunnermeier et. al. 2012) study indicate that higher non interest is subject to higher systematic risk, however study by (De Young and Torna 2013) evidences that non-interest income of banks is not explicitly risk increasing and concentrated banking system witness higher systematic risk; further, their study also proves that increase in non-interest income reduce the chances of bank failures. The financial soundness of the banks depends on the quality of its assets, higher rate of default has significant impact on the banks sustainability affecting the financial stability of the economy. Literature evidences that poor asset quality impacts the profitability of banks, however limited studies exist which measure the linkage between income diversification and profitability of banks with different asset qualities. Banks with higher loan default may have higher income diversification to offset the loan losses.

### 3. DATA VARIABLES AND METHODOLOGY

The data for the study is based on top five public sector and private sector commercial banks from India. The selection criteria for the banks were based top five banks from each sector having highest asset size. As the study evaluates the interrelationship between asset quality, income mix and return to equity shareholders, thus asset size of the banks becomes an appropriate measure for sample selection. Ten years data set has drawn from Capitaline to analyze the change in the income trends and asset size of banks over a period of 10 years' time. The main source of data comprises of income statement of banks, Balance Sheet of banks. In the dataset there are certain missing variables, therefore it is an unbalanced panel dataset.

#### 3.1. Definition of Variables

##### i) Income composition

- The income composition of bank comprises of major two essential activities interest income and non-interest income. Interest income is derived for the assets whereas non-interest income comprises of fee-based income, income from trading activity and other miscellaneous income.
- The first set of indicators used for the study were the proportion of non-interest income to total income and interest income to the total income.
- A second set of indicators used for the study consists of Herfindahl indices. The indices measure the focus on the bank's income generating activities. For measuring the diversification of the income Herfindahl -Hirschman-index has been used to understand the concentration of other income.
- $HHI = [Non\ interest\ income / Total\ income]^2 + [Interest\ income / Total\ income]^2$
- Higher value of HHI indicates the business is concentrated on the interest income and lesser diversification in the business whereas lower value indicates higher diversification in the income for the banks.

##### ii) Asset Quality

- This section aims to explore the relation between noninterest income and profitability differs across banks with different asset qualities. Studies indicate that bank's loan portfolio quality has relationship with the non interest income. (Nguyen 2012) study enumerates that asset quality has a positive relation with the non interest income under varying timelines. There is a contradictory study (Tennant and Sutherland 2014) which

indicates that there exist no association between the asset quality and the non interest income. The asset quality of the bank may or may not have an effect on the bank's non-interest income, however the rationale substantiates that these incomes enable the banks to absorb the losses occurring from the substandard quality of assets. Thus, a negative relationship can be interpreted between the loan loss and the non-interest income, simultaneously studies also prove that banks with large capital base would be in a better condition to absorb the loan losses.

iii) Profitability

- The profitability indicators selected for the study are Return on Assets and Return on Equity. Return on assets is an ideal proxy measure to evaluate the bank's profitability as the major business of the banks is loans and advances constituting major assets for the commercial banks. In isolation return on asset may be inadequate to arrive at conclusions, thus return on equity, net interest margin and net non-performing assets are considered to group the profitability indicators.
- We consider that the study will enrich the understanding of the determinants of non-interest income and its implications on bank risk and performance.

iv) Diversification in the asset composition

- Higher diversification in asset can be gauged from the ratio of non-interest-bearing assets in the bank's portfolio. The ratio is calculated as non interest assets to total assets. Higher diversification in the asset base results in risk mitigation for the banks.

Variable definition:

Classification	Description	Variable	References
Dependent Variable			
Performance measure	ROE	Return on Equity	(Lee.et.al. 2014)
Bank Diversification	ROA	Return on Assets	(Lee.et.al. 2014)
	Income diversification	HHI	(Stiroh, 2004) (De Young and Roland 2001)
	Net NPA	Net non-performing assets	(DeYoung and Rice, 2004; Stiroh 2004, 2006) Lepetit, L., Nys, E., Rous, P., Tarazi, A., (2008).

## 4. RESULTS AND FINDINGS

(Ramkrishnan and Thankor 1984) argued that diversification of income by banks increases banks credibility of overcoming information asymmetry while assessment of loan applications and monitoring of loans already approved. Studies also indicate that banks focus on only one area exploits the managerial competency and expertise of banks (Berger and Ofek 1996).

The first part of the study depicts the change in the business of commercial banks and asset size using trend over the specified time period. Both samples of public and private sector banks show sufficient heterogeneity in different types of banking activities, enabling us to analyze the behaviour of banks depending on their degree of product diversification. The table indicates the descriptive measures for all the banks and the individual group of banks. Over all the private and public sector banks average non-interest income are similar, however the composition of interest income of public sector banks is found to be higher which indicates concentration of credit as its main business activity. The non-performing assets of public sector banks are higher than the private

sector leading to decline in profits and on return on equity reflecting the quality of its earnings. The information about earnings provides information of the bank's financial performance which is essential to decision making (Dechow and Schrand 2010). Manipulations in the earnings affects the banks stability, loan quality and the overall valuations (Beatty and Liao 2011), thus banks earnings quality becomes an important measure for assessing shareholders value.

<b>PUBLIC SECTOR BANKS</b>	ROE	INT	NON-INT	NET NPA	HHI	ROA
Mean	8.13	66180.83	13786.22	17685.16	0.77	0.44
Median	10.28	41774.75	5265.24	10393.58	0.78	0.60
Standard Deviation	12.61	65168.56	19773.19	20822.54	0.06	0.69
Range	59.61	236193.58	75088.54	110854.70	0.23	3.04
Minimum	-32.85	17128.56	2468.85	0.00	0.62	-1.60
Maximum	26.76	253322.14	77557.39	110854.70	0.85	1.44
<b>PRIVATE SECTOR BANKS</b>						
Mean	15.29	28682.01	12332.75	3188.28	0.63	1.52
Median	16.31	23727.65	6982.88	1102.82	0.67	1.72
Standard Deviation	5.33	20269.71	13418.19	5936.38	0.10	0.51
Range	24.91	82918.14	56231.22	27823.56	0.29	2.02
Minimum	0.11	2369.70	575.53	0.00	0.50	0.00
Maximum	25.02	85287.84	56806.75	27823.56	0.79	2.02

The table depicts the total sample summary statistics for the variables used in this study. While Panel A shows the summary statistics of all banks, Panel B and C show the summary statistics by ownership types. Public sector banks indicate higher proportion of nonperforming assets as compared to private sector banks, higher dispersion is observed in the spread of net non-performing assets with reduction in the shareholders returns. Higher concentration in interest income is seen for public sector banks with higher probability of credit risk evidenced through rise in the NPA levels of public sector banks.

In the second part of the study return on equity is regressed on income diversification, other income, return on assets and net non-performing asset values. Initially we tested the dataset for non-stationary in the variables. Phillips Perron Test has been used to check for non-stationary in the data. The hypothesis tested was that Non interest income, return on assets, return on equity and Net NPA has a unit root. At both levels and first difference the data were found to be stationery. Following which the data are analyzed at Original value (i.e. at Levels)

Variables	Non-interest income	ROA	ROE	Net NPA
Phillip Perron test Statistics	-10.45	-5.3	-5.9	-6.97
p value	0.00	0.00	0.01	0.01

Two equations were derived one for private sector banks and other for public sector banks. Firstly, private sector banks ROE was regressed on non-interest income, return on assets, Net NPA and the diversification index. The table reflects the standardized coefficients and values representing t statistics at 5% significance level.

The table indicates that return on equity is significantly affected by the interest income, non-performing assets and income diversification and return on assets. For public sector banks all the indicators are significant affecting the shareholders return highest being NPA and income diversification. Our study reaffirms that increasing emphasis on non-interest income increases profits of banks in the form of higher return to shareholders.



	<i>Private Sector Banks</i>			<i>Public Sector Banks</i>		
	<i>Coefficients</i>	<i>t Statistic</i>	<i>P-value</i>	<i>Coefficients</i>	<i>t Statistic</i>	<i>P-value</i>
Interest income	-0.00012	-4.44229	5.92	-4.13	-0.56054	0.577956
Non-interest income	0.00018	3.338314	0.001	0.00	0.36	0.71
Income diversification (HHI)	37.12107	7.017926	1.08	8.99	0.247	0.805
Net NPA	-0.00014	-2.02473	0.6	-1.13	-0.105	0.916
Return on Assets	6.393446	9.097175	1.14	15.4	7.891	5.78

## 5. CONCLUSION

It can be concluded that noninterest income does not contribute to asset quality or variability of banks' profits. Examination of the relationship between income diversification and bank profitability indicate that diversification increases the profitability whereas provisions lowers the profit and return on assets which supports the theory of concentration of business limits the profitability of bank business. However, private banks earn higher profits from increasing income diversity than the public sector banks. Furthermore, we find that banks that have lower asset quality, in terms of non-performing loans or loan loss provisions garner higher income diversification payback compared to the banks that have higher asset quality. Our findings are insensitive to another sample and to the measures of profitability and diversification of income. Nontraditional business activities enhance the margins for the banks particularly for the banks which have higher defaults or loan loss provisions. Other income could be one of the critical factors leading towards sustenance of banks in the long run erstwhile when the quality of loan portfolio is deteriorating.

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# THE FINANCIAL STRUCTURE INFLUENCE ON NET PROFIT

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**Abstract:** *Financial structure is one of the most complex areas of financial decision making due to its interrelationship with other financial decisions variables. Decision related to financial structure is important because it directly affects the profitability of the organization. The purpose of this paper is to empirically examine the impact of capital structure on net profit for all companies active in the wholesale of motor vehicle parts and accessories in Romania (NACE 4531), with extended financial statements over a 10 years period from 2008 to 2017. In this study, the company's financial structure, which is the independent variable, is measured by financial leverage ratio. Net profit ratio (NPR) is used as the dependent variable for the study. Used data has been analyzed by using regression analysis to find out the links between variables. The output of the study may help to the entrepreneurs, board of directors and policy makers to design better decisions in the debt-equity choice.*

**Keywords:** *financial structure, net profit ratio, financial leverage ratio, profitability.*

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## 1. INTRODUCTION

One of the most complex areas of financial decision making is capital structure because of its interrelationship with other financial decisions variables. The main component of the financial decision is represented by profitability and it directly affected by the whole of the capital investment decision, which is the vital one. Commercial companies become profitable organizations. The ultimate goal of commercial companies is to achieve maximum profitability, thus minimizing costs. Finance mainly costed interest on the flow of one of the main components of the cost structure. Most researchers have found a negative link between leverage effect and debt and profitability in their research work. But some authors have presented different opinions, so they have found a positive relationship between the level of profitability and the level of debt in their studies.

At microeconomic level, the direct result of managing multifarious economic resource and their efficient use within investment and financing activities represent the performance index of the firm. This direct result should be based on complex and varied information on the evolution of all types of activities within the company. By analyzing the annual financial statements, a synthetic picture of the company's financial position and its performance can be found. These are therefore the main information sources that allow a qualitative analysis of how resources are used during the process of creating value.

Over the time, the influence of the financial structure on the company's performance level has received special attention in the finance literature. Analyzing the effect of the financial structure on the company's profitability will help us to know the potential problems at the level of finan-

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cial structure or profitability. Nowadays, trading firms need to run in a complex and competitive environment. Due to the competitive environment of the activity, it is necessary to choose the most suitable capital structure in order to obtain an optimal level of profitability.

The **financial structure** of the enterprise is represented by a complex and coordinated ensemble of the different sources of finance that the financial manager uses to meet financing needs. In other words, the financial structure can also express the existing ratio between short-term and long-term funding. At enterprise level, the term of financial structure reflects the composition of the capital or the totality of capital components. For this reason, it is called the structure of the capital of the enterprise. When leverage reaches a high share, this leads to an increase in debt, including in turn an increase in bankruptcy or financial distress due to conflicts between equity holders and bondholders. It is very difficult to make distinction between these two sources of agency costs. Accordingly, the financial structure or the capital structure of the enterprise is the sum of the sources of financing involved in forming the capital invested in enterprises. The main criteria that characterize the choice of an optimal financial structure are as follows:

- The leverage effect,
- Financial profitability,
- Lending capacity.

### 1.1. Literature Review and Previous Studies

Song (2005) suggests that the vast majority of the determinant factors of the capital structure suggested by the capital structure theories seems to be relevant for the Swedish market. There are also significant differences between the determinants of long-term and short-term debt. Raheman, Zulfiqar and Mustafa (2007) have indicated that the capital structure of non-financial firms has a significant effect on the profitability of companies listed on the Islamabad Stock Exchange. Dragota and Semenescu (2008) proved that the pecking order theory seemed to be more appropriate for the Romanian capital market, but the signaling theory was not totally rejected.

In their second paper on corporate capital structure, Modigliani and Mill (1963) show that firm value is an increasing function of leverage due to the tax deductibility of interest payments at the corporate level. A negative correlation between leverage and performance, described by the ratio of earnings before interest and tax to total assets, was found in the Chinese firms (Huang and Song, 2006; Chakraborty, 2010). There are also studies such as Ebaid's (2009), where no significant impact was found between capital structure choices and performance. Studies analyzing the impact of financing decisions on performance and profitability usually employ some of the most relevant capital structure determinants.

The trade-off theory as established by Myers (1984) states that the decision on the source of capital for a firm is evaluated based on the various costs and benefits associated with different sources of financing in their quest to obtain an optimal capital structure. The firm is exposed to bankruptcy costs, agency costs and the benefits associated with debt when evaluating the best source of financing. Bankruptcy costs are costs incurred by the firm when the probability of default on financing is greater than zero (Chen, Jung, & Chen, 2011).

Sina and Matubber (1998) observed that a number of factors such as operational inefficiency, effective credit policy, improper planning and controlling working capital, overhead can lead to the unfavorable position in the industry's managerial performance, profit-making capacity,

liquidity etc. Choudhury (1993) mentioned that the decline in the company's profitability may be influenced by the reduced use of debt. Because due to lack of adequate finances it has to give up some of the profitable opportunities and vice-versa.

According to Banu (1990), the capital structure of a firm has a direct impact on its profitability. If the enterprise structure is negative, this will have a negative impact on its profitability. In order to avoid this situation, Banu suggested that the financial directors involved should focus on the different aspects of the capital structure.

The agency cost hypothesis-higher leverage, or a lower equity capital ratio is associated with higher profit efficiency, all else being equal and consistent according to Berger, A. N. (2002) findings. When leverage is very high due to the agency cost of outside debt, it is considered that the relationship between performance and leverage may be reversed. In line with the agency theory and their argument that profit efficiency embeds agency costs, profit efficiency is responsible for the ownership structure of the firm.

Larry & Stulz (1995) illustrated on their study the effect of debt on firms in Ghana which resulted positive significant association between total debt and total assets and return on equity. A study carried out by Murphy (1968), on financing behavior of listed Chinese firms resulted in a conclusion that a negative relationship between profitability and firms leverage exists.

## 2. DATA AND METHODOLOGY

Berger, A. N. (2002) findings are consistent with the agency cost hypothesis-higher leverage, or a lower equity capital ratio is associated with higher profit efficiency, all else being equal. The relationship between performance and leverage may be reversed when leverage is very high due to the agency cost of outside debt. Profit efficiency is responsible to ownership structure of the firm consistent with agency theory and their argument that profit efficiency embeds agency costs.

### 2.1. Sample

The used model is applied to all the companies active in the wholesale of motor vehicle parts and accessories, NACE 4531, with extended financial statements submitted for the entire appraised period were taken into consideration (to eliminate the survivorship effect). Since we need extended format of the financial statements, only companies with turnover above 1 mil EUR have been included.

**Table 1:** Number distribution of companies

Year/Number	1 - 2,5 MIL EUR	2,5 - 5 MIL	5 - 10 MIL	10 - 50 MIL	+ 50 MIL	Total
2008	79	45	17	19	7	167
2009	100	47	21	20	8	196
2010	106	48	20	21	8	203
2011	109	48	24	20	8	209
2012	117	50	25	21	8	221
2013	120	53	26	21	8	228
2014	127	53	27	22	8	237
2015	130	55	28	22	8	243
2016	131	55	29	22	8	245
2017	130	55	29	22	8	244



## 2.2. Mode of analysis

Net Profit Ratio is calculated according to the following formula:

$$\text{NPR} = \frac{\text{Net profit}}{\text{Revenue}} \times 100$$

Leverage is calculated according to the following formula:

$$\text{Lev} = \frac{\text{EBIT}}{\text{EBT}}$$

where:

- **EBIT** = Earnings before interest and taxes is an indicator of a company's profitability.
- **EBT** = A measure of a company's ability to produce income on its operations in a given year.

## 2.3. Data source

The following table illustrates the results of the calculation of Net Profit Ratio and of the calculation of the financial leverage applied to a sample of companies active in the wholesale of motor vehicle parts and accessories (NACE 4531) for the entire period considered (2008-2017).

**Table 2:** Calculation of financial leverage and net profit ratio

data_bilant	Denumire societate	Lev	NPR
2010-12-31	PRIMAT GOLD IMPEX SRL	1.359077974	0.021535197
2011-12-31	PRIMAT GOLD IMPEX SRL	1.988214821	0.044101936
2012-12-31	PRIMAT GOLD IMPEX SRL	1.459927693	0.002603821
2013-12-31	PRIMAT GOLD IMPEX SRL	2.052189262	0.001053961
2009-12-31	PRIMAT GOLD IMPEX SRL	0.780877282	0.001198473
2008-12-31	PRIMAT GOLD IMPEX SRL	1.391640169	0.011579527
2014-12-31	PRIMAT GOLD IMPEX SRL	3.374349394	0.001309382
2015-12-31	PRIMAT GOLD IMPEX SRL	3.681678767	0.014126057
2016-12-31	PRIMAT GOLD IMPEX SRL	5.00322716	0.018056388
2017-12-31	PRIMAT GOLD IMPEX SRL	4.478398744	0.009091512
2010-12-31	COMAUTOGLOB SRL	2.071424042	0.003595771
2011-12-31	COMAUTOGLOB SRL	2.683757869	0
2012-12-31	COMAUTOGLOB SRL	2.62457851	0
2015-12-31	COMAUTOGLOB SRL	10.09759494	0.015872524
2014-12-31	COMAUTOGLOB SRL	17.68714004	0
2013-12-31	COMAUTOGLOB SRL	1.586210985	0.024297523
2009-12-31	COMAUTOGLOB SRL	2.017803618	0.00851984
2008-12-31	COMAUTOGLOB SRL	2.211307979	0.01122444
2016-12-31	COMAUTOGLOB SRL	3.855078258	0.048909167
2017-12-31	COMAUTOGLOB SRL	3.423021083	0.0360803
2010-12-31	COPROT SRL	0.433561536	0.046816875
2011-12-31	COPROT SRL	0.377991645	0.062537745
2012-12-31	COPROT SRL	0.531627839	0.050074288

High leverage indicates that companies are using debt to fund its assets and operations. Net Profit Ratio indirectly measures how well a company manages its expenses relative to its net sales. A high net profit margin means that a company is able to effectively control its costs and/or provide goods or services at a price significantly higher than its costs. A low net profit margin means that a company uses an ineffective cost structure and/or poor pricing strategy. For example, „COMAUTOGLOB SRL” illustrates a low net profit ratio for the entire period (2008-2017). On the other hand, „AUTO ABIL SRL” converted 64,4 % of her sales into profit in 2010.

## 2.4. Empirical model

To analyze the influence of an enterprise's financial structure on its capital, we will use a linear regression model of the form:

$$Y = \alpha + \beta X + e$$

**Table 3:** The analysis of model variables

<b>Y</b>	$\frac{\text{Net profit}}{\text{Revenue}} \times 100$	The endogenous variable reflects <b>net profit ratio</b> . It is calculated by deducting all company expenses from its total revenue. The result of the profit margin calculation is a percentage
<b>X</b>	$\frac{\text{EBIT}}{\text{EBT}}$	The exogenous variable reflects <b>leverage ratio</b> for evaluating financial structure. A high debt/equity ratio generally indicates that a company has been aggressive in financing its growth with debt. Typically, a D/E ratio greater than 2.0 indicates a risky scenario for an investor. Negative leverage occurs when a company purchases an investment using borrowed funds, and the borrowed money has a greater cost, or higher interest rate, than the return made on the investment.

## 3. RESULTS AND DISCUSSIONS

Applying the regression equation previously described on the data panel in E-Views, we obtain the following result on which interpretations will be made:

Equation: UNTITLED    Workfile: APPENDIX_DATABAS...    [Buttons]				
View   Proc   Object   Print   Name   Freeze   Estimate   Forecast   Stats   Resids				
Dependent Variable: NPR2				
Method: Panel Least Squares				
Date: 06/02/19    Time: 12:55				
Sample (adjusted): 2008 2017				
Periods included: 10				
Cross-sections included: 254				
Total panel (unbalanced) observations: 2190				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.418604	0.170510	31.77874	0.0000
LEV2	-0.134164	0.044684	-3.002472	0.0027
R-squared	0.004103	Mean dependent var		5.234318
Adjusted R-squared	0.003648	S.D. dependent var		7.458165
S.E. of regression	7.444548	Akaike info criterion		6.853754
Sum squared resid	121261.8	Schwarz criterion		6.858952
Log likelihood	-7502.861	Hannan-Quinn criter.		6.855654
F-statistic	9.014840	Durbin-Watson stat		0.671094
Prob(F-statistic)	0.002708			

**Interpretations:** The econometric technique we will use is **Panel data regression**. In statistics and econometrics, panel data or longitudinal data are multi-dimensional data involving measurements over time. By combining data in two dimensions, panel data gives more data variation, less collinearity and more degrees of freedom. Given the overall concentration of revenues among the largest companies in the overall business environment and the selected list of companies, the sample is divided in five different groups by turnover level, that will further represent the cross-sectional series in the panel data model. The intercept is significantly different from zero to a confidence level of 1%. The slope of the regression curve is different than 0 because of its p-value that is at a level of 0.2%, well below the maximum risk level of 5%. In this case, we rejected the null hypothesis that leads to the conclusion that all slope coefficients are different than zero. The value of Probability for independent variable (0.0027) indicates that the coefficient is significant. Coefficient of independent variable illustrates an inverse relationship between the financial leverage and the Net Profit Ratio, but its influence on the dependency variable is very low due to the value of the coefficient approaching 0. The values for R Squared (0.004) indicates that only 0.4 % of the various Net Profit Ratio is explained by Financial Leverage.

#### 4. CONCLUSION

The goal of any business is to maximize assets and minimize costs. In this regard, it is necessary to analyze the weight of each financing state (own funds or debts) in the share of total financing. This study investigated the relationship between financial leverage and net profit margin ratio of the firms that belong to all the companies active in the wholesale of motor vehicle parts and accessories, NACE 4531, with extended financial statements submitted for Romania.

The relationship of these 2 variables was studied using a panel regression model with 2190 observations in total (10-time series for the period 2008-2017). Highly leverage firms have lower profitability and lower leverage firms have higher profitability. The results obtained using panel data are considered to be most relevant due to the large number of observations and on the basis of which we can draw the final conclusions.

The results generated by EViews show that in the context in which we worked; the financial leverage has a negative impact on net profit ratio. Nevertheless, the impact is not significant and the financial leverage only slightly influences the net profit. The results of this study are consistent with the results of previous studies conducted by Ebaid (2009), Huang and Song (2006) and Chakraborty (2010). The results of this study are not matching with the results of previous studies conducted by Larry and Stulz (1995) in which he found a significant positive association between leverage and profitability. He conducted the study in Ghana where the cost of debt is lower than the cost of debt in Romania and he took top twenty companies listed. This could be the reason of contradiction in results of both studies. Because the calculation is complex, other analyzes could lead to different results depending on the calculation method.

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# INTERNAL CRISIS COMMUNICATION AND CORPORATE CULTURE: FORGING THE LINKS

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**Abstract:** *The purpose of this paper is to investigate the relationship between corporate culture and internal crisis communication by comparing the internal crisis communication practice of Swiss companies, the features of their corporate culture and how representatives of these companies interpret the influence of culture. The results indicate that misalignment between the different levels of corporate culture would lead to inconsistencies and loss of effectiveness in the internal crisis communication.*

**Keywords:** *Strategic crisis communication, corporate culture, internal and employee communication.*

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## 1. INTRODUCTION

With the rise of social media and increasing expectations of stakeholder groups crisis communication has become essential for the successful resolution of a crisis and thus the company reputation. Internal stakeholders, employees in particular, are considered to play a key role in the management of a crisis. They have a defined legal stake at and develop an emotional relationship with the organization. Furthermore, they play a role as both senders and receivers of the internal communication [11]. Therefore, internal crisis communication requires similar analytical preciseness as external crisis communication [6]. Surprisingly, the focus of crisis communication and management has traditionally been on external stakeholders such as media and clients, and few researchers have addressed the role of internal stakeholders [19] [11] [14].

Culture has been identified as an important influencing factor for crisis management and communication [8] [19]. In recent years, corporate culture has become a top priority for management [9]. But crisis communication theory seems to lack cultural contextualization [13] and a long-standing tradition for including an intercultural perspective [10]. Most sources investigate the relationship between culture and communication in general [19]. Especially in times of crisis, it is of high significance to understand the dynamics and the potential change of corporate culture in order to be less irritated or anxious with the unfamiliar and irrational behaviors of people within an organization [22].

This manuscript seeks to contribute with insights on the relationship between corporate culture and the internal crisis communication. Because the internal crisis communication is targeting the internal stakeholders and takes place inside of the organization, the impact of the culture on the crisis communication practice is considered to be high.

Semi-structured interviews with representatives of mid- to big-sized Swiss manufacturing and service companies have been conducted. Managers in the field of corporate communication

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and crisis management or employees who have access to sufficient information about this topic within the chosen organization have been interviewed. Each of the companies have experienced an organizational crisis situation. The size is an important criterion as companies of bigger size tend to have a well-developed communication and crisis management and communication infrastructure and concept as well as tend to put considerable effort in managing the corporate culture. The purpose of the research was to explore how the companies communicate internally in a crisis situation, what are the features of their corporate culture and how the culture is influencing their crisis communication.

## 2. THEORETICAL FOUNDATIONS

### Internal Crisis Communication

Internal crisis communication is “the communicative interaction among managers and employees, in a private or public organization, before, during, and after an organizational or social crisis” [12]. As any communicative interaction it is characterized by objectives, target groups, content and messaging, channels of communication and coordination and direction setting [17] [18] [1] [5] [6]. Internal crisis communication is shaped by the existing internal communication as well as the crisis situation type and crisis management practice. Figure 1 illuminates the key elements of an internal crisis communication.

The effects a crisis can produce on individuals are important to be identified in order to establish the internal crisis communication objectives to address these effects [6] [18] [24]. As a consequence of a crisis, affective reactions such as anger or fear can be challenging. Anxieties among employees decrease performance and motivation demonstrably [19]. Rumors, decreasing working morale and questioning loyalty to the organization impact daily business, and thus influence the entire organization [18].

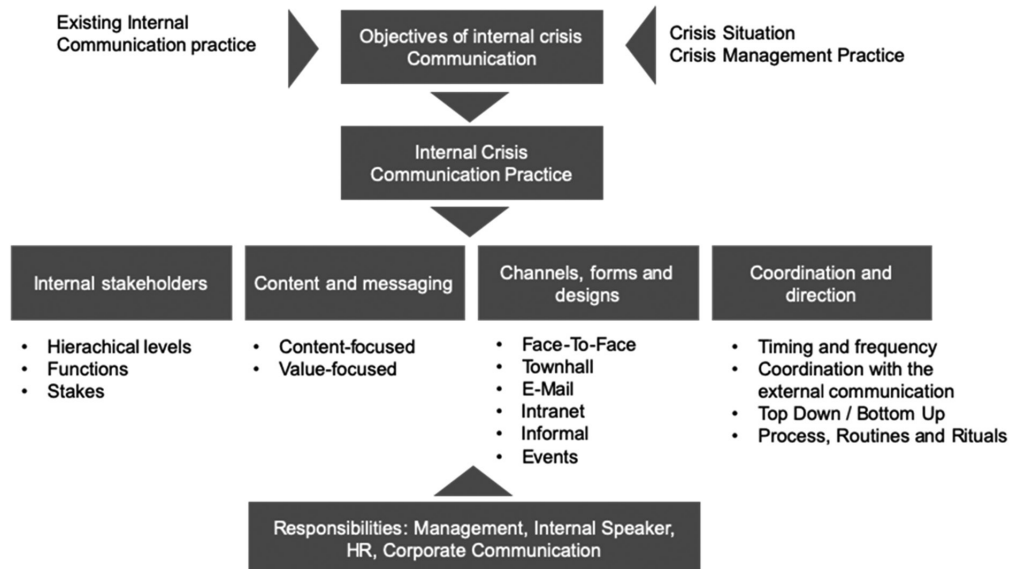
Based on qualitative analysis, [7] defines four objectives of the internal crisis communication to deal with the negative effects of a crisis:

- Lead in the crisis: explain, mobilize, listen, reflect.
- Stabilize corporate climate, anticipate and combat conflicts, regulate rumors.
- Maintain trust and secure engagement for crisis resolution.
- Create open culture for «mistakes», i.e. create a «crisis culture”.

As members of the organization, employees identify with the corporate values and share a common understanding and language. Depending on how the organization communicates in the crisis, employees will act as supporters or adversaries [7]. Despite well-planned and formulated internal communication, a comparison of managers’ intentions and employees’ interpretations shows often misinterpretation and resistance. Effective crisis communication is based on a trust relationship that are built over time with the help of communication and respondent actions [14].

The objectives of internal crisis communication can operate on the cognitive, affective, or behavioral reactions of employees [17] [18]. The cognitive objective aims to decrease incertitude and to increase reasonable expectations among the workforce. The affective objective attempts to raise the employee’s sense of belonging by rising the identification and trust of the company with the practiced communication strategies. Simultaneously, behavioral objectives seek to maintain employee’s commitment towards the organization and thus activating behaviors [15].

Thus, internal crisis communication messaging is content-focused and value-focused [1]. Often the informative content during a crisis is scarce, so that the value-focused content becomes more important. Value-focused content use statements that create trustworthiness through honest, frequent and open dialogue with employees such as focusing on the corporate culture and identity. In order to reach the mentioned objectives, internal crisis communication try to achieve a balance.



**Figure 1:** Elements of an internal crisis communication concept (adapted from [7])

Open dialogue means the use of direct communication channels, especially face-to-face-communication, which are considered critical for employee satisfaction [16]. Open communication climate, regular dialogue with management, recognition of bottom-up suggestions and good management communication abilities strengthen the employee engagement and their readiness to actively support the management efforts [2].

## Corporate Culture

The culture of a group can be defined as the group's shared learning as it solves its problems of external adaptation and internal integration. The groups accumulated learning eventually builds its culture by defining what is valid and, therefore, to be taught to new members as the correct way to perceive, think, feel, and behave in relation to those problems. According [22], this accumulated learning is a pattern or system of beliefs, values, and behavioral norms that come to be taken for granted as basic assumptions and "eventually drop out of awareness". Corporate culture in this sense can be understood to be the culture of a particular and unique social group – namely the corporation.

According to [22] organizational culture can be dissected into three levels. First, the level of artifacts refers to the visible, explicit behavioral regularities, explicit rules of interaction, formal rituals. Second, the level of espoused beliefs and values includes the officially acclaimed values, identity and purpose. These elements are often implemented in the philosophy or ideology of the organization in order to act as a guidance for uncontrollable or difficult events such as an organizational crisis. Third, the level of basic underlying assumptions or the cultural DNA describes the implicit rules of interaction between people, how they feel, their instantaneous and subjective assessments, perceptions and reactions. [3] [4] identified in addition to the theory of

Schein, that basic assumptions are comparable to theories-in-use that actually guide behavior and tell people how to perceive, think and feel.

Culture and communication are interrelated. Whereas cultures are created through human interaction and social communication, the reverse is also the case; that is, communication practices are largely created, shaped, and transmitted by culture [20].

Being the focus of this paper, the latter needs some explanation: Cultures are subjective. Shared culture guarantees shared subjectivity. And shared subjectivity enables cooperation among those who share that same particular subjectivity. A shared value system as well as shared and implicit pattern of communication enables successful communication – successful in the sense of what needed to be told has been understood correctly – respectively decrease the danger of misunderstanding – misunderstanding in the sense of what needed to be told has been understood falsely.

A shared value system and implicit rules of social interaction also create trust and effective communication as already mentioned is a matter of trust. The level of trust decides about the credibility of the sender's message (hidden agenda? Lip service? Manipulative effort? Fake news) and whom the information is given to and whether and how much information is given to the receiver.

### 3. FINDINGS AND DISCUSSION

In this section, the results of the interviews will be presented in a synthesized form. To analyze and structure the interview answers the Edgar Schein's Corporate Culture model and the presented internal crisis communication elements were used. The study points out to deeply rooted links between the corporate culture and the internal crisis communication.

First, all three levels of corporate culture touch upon elements of the internal crisis communication practice:

1. Level 1 "Artefacts and Behavior" is reflected by the used channels of communication (face-to-face, e-mail, intranet), its dispersion (to all, only those concerned, only management), its direction and coordination (cascade top down, at once to all employee), responsibilities (centralized and coordinated by a specific unit, top management task) or feedback loops.
2. Level 2 "Espoused Values" refer to the objectives of the crisis communication being content oriented (task and goal oriented, what next? what to do?) or value oriented (as a mean to signal control and care) and gives guidance on the questions such as who should know, who should act or is responsible.
3. Level 3 "Basic Assumptions" explain implicit employee expectations, routines, rituals, informal rules of responsibility, engagement, entitlement, appropriateness.

Second, five recurrent and prominent opposing pairs in internal crisis communication pattern emerged that are connected to corporate culture. The five themes concern the company's normative approach on:

1. Process and routines,
2. Dispersion and involved internal stakeholders,
3. Timing,
4. Objectives such as crisis culture,
5. Responsibilities.

**Table 1:** Internal Crisis Communication Practices according to interviews

1	<b>Regulated and Prepared</b> <ul style="list-style-type: none"> <li>• Clear (pre-defined) communication guidelines (often top down)</li> <li>• Communication processes are centralized</li> <li>• Communication is coordinated through specifically appointed units</li> </ul>	<b>Flexible and Spontaneous</b> <ul style="list-style-type: none"> <li>• Ad hoc, topic dependent communication.</li> <li>• Communication happens randomly (for example communication software Yammer)</li> <li>• Processes are not defined other than there is a tool with which everyone can use to communicate.</li> </ul>
2	<b>Confidential and Selective</b> <ul style="list-style-type: none"> <li>• Selective information provision</li> <li>• Communication to particular receiver groups only</li> <li>• Focus: avoidance of leakage (leakage of information due to mass distribution)</li> </ul>	<b>Open and transparent</b> <ul style="list-style-type: none"> <li>• Full information provision</li> <li>• Information provision to all</li> <li>• Focus: Avoidance of rumor (rumor creation due to incomplete information)</li> </ul>
3	<b>Accuracy / Quality</b> <ul style="list-style-type: none"> <li>• Detailed and accurate situation analysis preceding crisis communication</li> <li>• Focus: no false information</li> </ul>	<b>Speed</b> <ul style="list-style-type: none"> <li>• Instantaneous information delivery</li> <li>• Focus: no anxiety among staff</li> </ul>
4	<b>Mistake avoidance</b> <ul style="list-style-type: none"> <li>• Shame avoidance</li> <li>• Risk averse</li> <li>• Zero-error culture</li> </ul>	<b>Solution oriented</b> <ul style="list-style-type: none"> <li>• Mistake tolerant</li> <li>• Risk tolerant</li> <li>• Transparency concerning one's mistakes</li> </ul>
5	<b>Divided responsibility</b> <ul style="list-style-type: none"> <li>• Division of communication roles (legal department) and cascade down</li> <li>• Indirect communication of CEO (indirect channels such as intranet)</li> <li>• Slow reaction because of approvals and participation of different teams</li> <li>• Development of rumors and decrease of trust and credibility</li> </ul>	<b>Top management responsibility</b> <ul style="list-style-type: none"> <li>• CEO leads personally the communication</li> <li>• CEO directly addresses employees face-to-face</li> <li>• Quick and flexible reaction because CEO in the lead</li> <li>• Employees take the messages seriously; credibility is increased, and trust is secured</li> </ul>

Third, for effective internal crisis communication the practices, which fall into level 1 “Artefacts and Behavior”, are largely in line with level 2 “Espoused Values” confirming previous studies [14]. New is the finding, that effective internal crisis communication is also strongly correlated to the congruence between level 2 “Espoused Values”, on the one hand, and level 3 “Basic Assumptions” within the company on the other hand.

Two cases illustrate this relationship:

#### Case 1: Mistake avoidance versus error tolerance

1. “Espoused Values”: As a company we support transparency and openness (also concerning mistakes). We support open and honest communication in order to avoid mistakes being carried on for long time causing way more damage than when they have been communicated at an earlier point in time.
2. “Artefacts and Behavior”: It appears, though, that in more often than not mistakes were not communicated because people feared punitive repercussion.
3. “Basic Assumptions”: at the end of the day, people fear mistakes and are more risk averse than they cherish innovation. As long as it is routine, one is on the safe side. As soon as one tries something new, there is greater risk of making mistakes. If there is no direct repercussion, it definitely impacts one's career path if one admits to too many mistakes.
4. Result: No full and prompt disclosure of problems at the beginning of a crisis.

Case 2: High versus low power distance / Endorsement versus flexibility

1. “Espoused values”: Flat hierarchy and “You”-culture (informal)
2. “Artefacts and Behavior”: People often still use “You” (formal) and communicate in a hierarchical way. In crisis situation some people fall back into their hierarchical position and expect internal crisis communication to proceed top down in cascades along the line.
3. “Basic Assumptions”: We are a German manufacturing company with a long tradition of hierarchy – why should it be different now all of a sudden? To a large extent trust is correlated with position. It makes a difference whether a crisis is communicated by the CEO or via an open company chat-app. What information can be trusted, how credible is the content of the information and how should the information be classified? As stated above, the level of trust decides about the credibility of the sender’s message.
4. Result: Credibility and classification problems.

Whatever one’s choice between the opposite pairs described above, for an effective internal crisis communication consistency between “Espoused Values” and “Basic Assumption” is important.

Fifth, all the company representatives confirmed that their respective corporate culture reflects the internal crisis communication practices.

#### **4. CONCLUSION, LIMITATIONS AND FURTHER RESEARCH**

This study reveals that corporate culture is rooted in the internal crisis communication practice. There are indications that successful internal crisis communication practices require congruence between the three levels of corporate culture, between “Artefacts & Behavior” (level 1) and “Espoused Values” (level 2), on the one side, and between “Espoused Values” (level 2) and “Basic Assumptions” (level 3). Inconsistencies can lead to less effective communication effort, rumors and loss of trust and engagement.

The results of the study have numerous limitations. First, different types of crisis call for different crisis management and communication effort. The interviews focus on organizational crises, and not on emergency situations with strong external trigger such as environmental disasters or terror attacks. Second, the influence of corporate culture before, during and after the crisis is not investigated. Further research should explore in more detail which parameters of corporate culture can be adjusted as a part of the organizational crisis preparedness. Third, a crisis situation always triggers change in the corporate culture. Future research could investigate how internal crisis communication can accompany and intensify the learning from the crisis and mistakes and how it can contribute to a new resilient culture. Forth, the insights were won in Swiss companies operating in international context, reflecting Swiss corporate values. The interviews are of limited number, and mainly in the manufacturing industry. Last but not least, the interview partners represent the management level; the employee’s perspective should be integrated.



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# SMART TOURISM CONCEPT IN SLOVAK MARKET CONDITIONS

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**Abstract:** *Tourism is an integral part of Slovak economy. As current market conditions are continuously evolving, tourism had to undergo many changes. Many economical areas are currently under the huge influence of ICT sector and tourism is no exception. Main aim of this paper is to create an integrated theoretical base of the topic Smart Tourism. This paper includes a brief overview of Smart Tourism concept, complex definition of Smart Tourism and categorization of smart technology tools used in tourism. The last chapter is dedicated to Smart Tourism concept use in Bratislava, Slovakia. The paper may stand as a basis for further Smart Tourism analyses and for practical implementation this concept into praxis of organizations operating in tourism sector worldwide.*

**Keywords:** *tourism, smart, ICT, Slovakia*

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## 1. INTRODUCTION

Tourism plays a vital role in many developing and already developed countries as well. Some of them are critically dependent on this economical sector and thus is important to research it and support if needed. Help could be brought by ICT technology, simply called as smart technology. Smart technology is, considered in tourism, however, still quite a new factor, so there is no general guideline to its application and implementation. And this may be a challenge for some enterprises, because often a single wrong decision can lead to devastating consequences. And there are still many unanswered questions or unsolved queries which have to be researched in order to reach the full potential of Smart Tourism.

## 2. “SMART TOURISM” DEFINITION

Listed are three definitions of Smart Tourism:

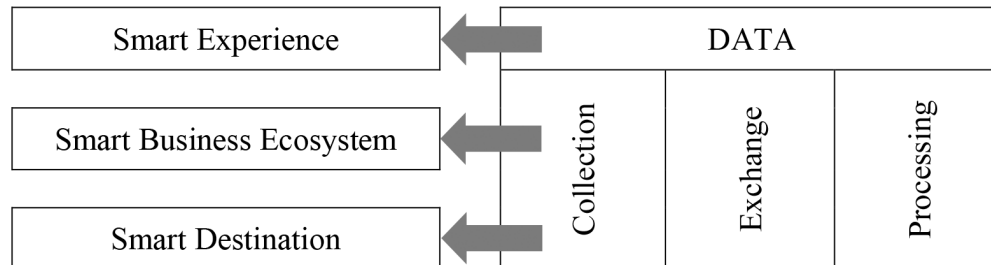
- ‘Individual tourist support system within the context of information services and an all-encompassing technology.’ [1]
- ‘The term (*note: „Smart“*) has been added to cities (i.e. smart city) to describe efforts aimed at using technologies innovatively to achieve resource optimization, effective and fair governance, sustainability and quality of life.’ [2]
- ‘Cloud computing, big data, mobile apps, location-based services, geo-tag services, beacon technology, virtual reality, augmented reality, and social networking services are all cutting-edge examples of smart technologies enhancing the tourism experiences and services.’ [3]

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Lopez de Avila explains Smart Tourism as a set of several components supported by ICT. It connects these Smart's: experience, business ecosystem and destination (cities). The point is, that smart city principles do not consider only residents of a city and its surroundings, but tourists as well. Main aim of Smart Tourism is to increase the quality of mobility, resource availability/ allocation, quality of life/visit and sustainability. [4]



**Figure 1:** Components and layers of Smart Tourism [4]

Although high number of different definitions are available in literature, there is no such a definition which would fully unify the two sectors – Smart technology and Tourism. After reviewing several other interpretations of the term “Smart Tourism”, we managed to create a single unifying definition which is compliant with all the essentials needed to be covered by intersection of these sectors:

*“Smart Tourism is a style of offering tourism products, which integrates available smart technology into standard touristic experience, enables to measure tourism more effectively and provides tourist with innovative state-of-the-art solutions.”*

This Smart Tourism definition emphasizes the interconnection between smart technology and tourism, offers two-sided view of the topic and can provide a basis for future analyses and re-searches.

### 3. SMART TOURISM SPECIFICATIONS

Smart tourism is not a subgroup of tourism. Thus, we are not able to strictly say that it is on a lower level in the sector structure. Smart technology stands just as an enrichment of basic tourism and its role is to make tourism simpler and more attractive for customers. This is a **customer-oriented** function of Smart Tourism.

However, at the same time it enables companies to collect information about the customers and provide a basis for company decision-making. Collected data is today known as big data. And the sources of such data are mainly smart devices – phones, computers, GPS or the people themselves through their social media accounts, pictures or videos. [5] This is a **data collecting** function of Smart Tourism.

Due to W. C. Hunter, the aim of Smart Tourism is to build a sort of social ecosystem via information exchange, which is possible mainly through mobile devices with internet connection. [6] Therefore, we are able to say that smart technology in tourism is not only a tool for collecting data about where your customer currently is, or which products they are interested in. It has a deeper, social meaning and stands mainly as a tool which connects people with similar interests and/or in the same destination into one community. This is a **social** function of Smart Tourism.

In the table below you can find main differences between standard tourism and Smart Tourism:

Tourism	Smart Tourism
Standard procedures with standard tourism methods and tools.	Standard or brand-new procedures with innovative tourism methods and tools.
Low rate of data collecting due to difficulty of collecting processes.	High rate of data collecting due to smart technology availability.
Is a part of the economy; produce income directly.	Is only a middleman, enrichment of standard tourism; does not stand as part of the economy and does not produce income directly.
High number of different providers of different parts/stages of a travelling experience.	Usually one subject, who provides the customer with all/most of the parts of a travelling experience.
Very low rate of interactivity.	High rate of interactivity.
Very low involvement of shared economy concept.	High rate of shared economy concept involvement.
Limited options to manage a travelling experience online.	Almost everything can be handled online.

**Figure 2:** Differences between Tourism and Smart Tourism

#### 4. CLASIFICATION OF SMART TECHNOLOGY IN TOURISM

Smart technology used in tourism has not been categorized yet. We divided it into several categories, which enable companies to better identify customers' needs and expectations.

- **Websites and web portals.** The main reason which enables an existence of smart technology and its use in tourism is an internet connection. And the most basic smart technology available are websites which usually provide information about destination, city or specific attraction. The second type of websites is a portal, which enables its users to interact and e.g. plan a trip, book an accommodation, rent a car or buy a flight ticket.
- **Mobile applications.** Mobile applications are often based on the website and their purpose is to make a whole online procedure simpler and faster. Some of the applications, however, do not have a web basis and are available only in the form of an application. Purpose of applications is similar as by websites, moreover they should strengthen the travelling experience by user interaction and geolocating.
- **Portable audio and video devices.** These gadgets usually do not require the use of customer's own device, although in some cases they can be already integrated in an application. The typical example of these portable audio and video devices are city guides with audio/video commentary which a trip organizer lends their customer for a specific period of time.
- **Smart infrastructure.** These tools can be considered in two different "smart areas" – smart tourism and smart cities. Their main purpose is to act as a help for tourists (usually maps or interactive info totems) or as a space for advertisement, but all visually compliant with the surroundings. Another example is smart bench which runs on solar energy generated in built-in solar collectors and provides a space for video-presentation and possibility to e.g. charge the phone. Other examples are wireless network (Wi-Fi) or shared economy tools, such as bike sharing, carsharing or flat sharing.
- **Augmented reality systems.** Typical examples of augmented reality systems are holograms or a virtual reality device, which enables the customer to travel without any physical transportation.
- **Integrating smart solutions.** Smart solutions, which purpose is to create an integrated touristic system, e.g. of transport, attractions and sightseeing or entertainment and shopping. Typical example is a city loyalty discounts program.

## 5. SMART TOURISM IMPLEMENTATION IN BRATISLAVA, SLOVAKIA

Bratislava, as the capital of Slovak republic, is the biggest and at the same time the most visited Slovak city. Based on Bratislava Tourist Board's (hereinafter as 'BTB') data, the annual count of Bratislava visitors increased during the 9 years (2008 - 2016) by more than 60 %. [7]

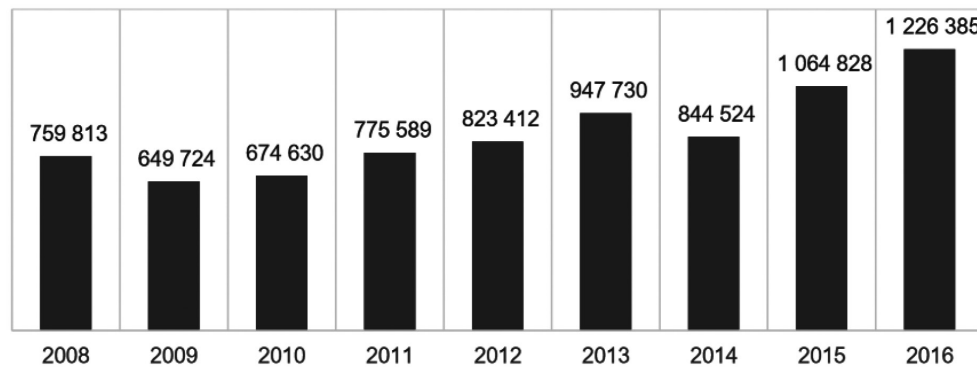


Figure 3: Annual Count of Bratislava Visitors (2008 - 2016) [7]

These numbers provide an opportunity to increase them even more. 'BTB' is aware of this fact and has already started to implement several smart solutions to the city infrastructure.

Bratislava currently runs two main **websites**. Bratislava.sk aims at local inhabitants and tries to make their everyday citizens' life simpler. On the other hand, target group of visitbratislava.com is different. This website provides domestic and foreign tourists with basic historical, geographical, cultural and artistic information and should act as a background when planning a trip.

Several **mobile applications** are related to Bratislava. An official one is called Bratislava, has more than 10,000 downloads and is, more or less, simplified version of visitbratislava.com website. It can be used offline and provides the user with travelling tips, main city attractions, events, restaurants or transport. Besides this one, Bratislava is the main topic of several other apps concerned about bike sharing, sightseeing or transportation.

**Portable audio and video devices** are mainly part of third-party mobile applications. By city tours, Bratislava prefers human guides, what makes the touristic experience more interactive and personalized, although some private agencies also offer portable audio guides.

Several smart benches and interactive touchscreen info totems create **smart infrastructure** located to create a modern impression and at the same time to help tourists to get the information they want. This is possible also because of free internet connection through Wi-Fi in BTB locations, public transport and in the city centre. Increase in popularity is noticeable in shared economy systems, mainly in Airbnb, Uber or bike sharing. Currently, more than 300 flats or rooms are available for stay in Bratislava and the most popular bike sharing program has now after one year of order more than 41,000 users who have made together more than 220,000 rides. [8]

Several private **virtual reality** bars are present in Bratislava, however none of them provide their customers with virtual touristic experience yet.

**Integrating smart solutions** are the main symbol of Bratislava being smart. The Integrated Transport System (ITS) in whole Bratislava region and Bratislava CARD (BC) are its pillars. ITS

connects public transport and suburban bus and railways transport and enable people to travel with only one common ticket. The purpose of the BC is to provide tourists with several discounts and free entries or transportation, while its purchasing fee starts only at 18 € per 24 hours.

## 6. CONCLUSION

Join of tourism and smart technology seems to have huge potential. Especially in country like Slovakia, which has rich history and tradition of tourism and still a lot to offer. This “smart wave” comes from the USA and the western Europe, but now or later will definitely fully influence the tourism in central- and eastern European countries. And we recommend the companies operating in tourism sector to start to take smart tourism concept into account, because this may be a significant competitive advantage in the future market. And Slovakia, especially Bratislava, is on a good way.

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# TOWARDS A SUSTAINABLE ECONOMY

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**Abstract:** *This paper discusses the main criticisms and alternative proposals advanced by several scholars regarding the market economy-based development model. The literature review highlights a significant and growing awareness of environmental issues and strong criticism of the current economic development model, which does not account for limited natural resources and Earth's capacity for additional pollutants.*

**Keywords:** *Sustainability, Bio economy, Circular economy.*

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## 1. INTRODUCTION

The current economic development model is based on a market economy in which decisions about production, distribution, consumption and investment are made by various players acting on the markets in accordance with the law of supply and demand. In some modern economies, governments also intervene on a limited basis for reasons of social justice. Such cases are considered mixed economies.

However, the current system has revealed its limitations regarding human beings and the environment.

In recent decades, awareness of limited resource availability, environmental degradation and social inequalities has led many economists, environmentalists and government officials to re-think their economic and social policies.

Many scholars understand that the development model adopted during the Industrial Revolution is no longer globally sustainable. This model, which is based on the uncontrolled consumption of natural resources and the pursuit of profit at any cost, and which fails to account for the quality of life of Earth's inhabitants, has become increasingly globalised.

The linear economic model adopted so far is characterised by mass production and limited benefits from accumulation of wealth available only to some. Such outcomes are accomplished through the continuous exploitation of resources without concern for their exhaustion.

This model has led to the large-scale pollution of the biosphere in a relatively short period of time. This is believed to be the basis of the climate change phenomena observed in recent years.

Scholars, politicians and environmentalists have raised a number of doubts and questions about environmental issues [1].

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As a result, alternative approaches to the market economy have emerged that go beyond the sole problem of economic growth and can better respond to global problems, such as the climate crisis, pollution, resource scarcity, world hunger and immigration.

## 2. THE SCHOOLS OF THOUGHT

The modern economy emerged at the end of the 18th century with the classical economics of Adam Smith, whose main themes were production and growth [2]. However, in 1798 Thomas Malthus, in his paper “An essay of the principle of the population as it affects the future improvement of society”, discussed economic stagnation due to excessive demographic increases (geometric population growth) that lead to the cultivation of ever less fertile lands, resulting in insufficient food supplies (which instead grow arithmetically) [3]. In the 1800s David Ricardo, who co-founded the science of political economy with Smith, resumed Malthus’ discussion with the “law of diminishing returns”, a problem related to the limited availability of resources. Ricardo highlights that the availability of natural resources is limited and there is a limit to be respected that cannot be exceeded [4]. In the mid-1800s, even John Stuart Mill [5] and William Stanley Jevons [6] highlighted the scarcity and consequent exhaustion of natural resources.

In the late 1930s, even more substantial doubts were introduced by John Maynard Keynes, who, inspired by Malthus, proposed a new approach to the economy by focusing on social aspects (welfare). His thinking differed from previous economic approaches because it was based on liberalism “at all costs” and laid the foundations for a new macroeconomy [7].

In the 1960s, the economist Kenneth Boulding combined ecology and economics, two previously unrelated concepts, to create the new science of environmental economics. To better explain the problem of physical limits, he compared Earth to a spaceship located in the space of the universe, from which it acquires limited resources and where it disposes of its waste [8]. Later, in the face of environmental damage caused by economic activities, while not questioning the fundamental principles of the liberal neoclassical economy, some charging economic compensations for environmental damage was proposed. The Polluter Pays principle, sanctioned by the OECD in 1972 [9], constitutes an appropriate corrective measure for the current system because it incorporates environmental costs into production costs. According to some, however, such compensation cannot heal the damage caused to the biosphere by human activities. For example, no economic compensation can reverse the extinction of a living species [1].

In the 1970s, Nicholas Georgescu-Roegen, a Romanian economist, founded bioeconomics, or ecological economics, and proposed the principle of degrowth as a counterpoised response to the neoliberal or neoclassical economy. Georgescu-Roegen and other bioeconomists claim it is no longer possible to maintain current consumption levels and that it is necessary to change our development model natural resources management. Until then, human beings had unshakable confidence in progress as the only solution to problems, including environmental ones, so people never bothered to seek current solutions because they trusted that future technologies would solve all problems. Furthermore, Georgescu-Roegen introduced the idea that economics must account for the laws of physics. He proposed decreasing production and consumption in rich countries, not in terms of renunciation, but to facilitate improvement. Referring in particular to the second law of thermodynamics, he affirmed that resources, once used, inevitably degrade into waste and are no longer usable in production processes, so it is necessary to reduce them or recover them for use as secondary materials in other production processes [10].

At the same time, a Club of Rome report (The Limits to Growth, also called the Meadows Report) described economic growth as a result of the scarcity of raw materials, pollution and loss of biodiversity. “Zero growth” was proposed as a solution [11] – [12] – [13] – [14].

A similar approach was proposed by René Passer, in his book „l’Economie et le vivant” of 1979 which states that the economy must respect the laws of nature [15] – [16].

In Italy, the main supporters of environmental awareness were Giorgio Nebbia and Laura Conti.

In line with these concepts, in 1977, a study on sustainable social development, commissioned by President Jimmy Carter (Global 2000), envisioned a population increase and, consequently, increased vulnerability and serious conflicts between populations over resources and the environment [17].

Following a different approach, Paul Crutzen et al. [18] highlighted the profound changes caused by humans to the planet’s physical and biological systems from a geological point of view and introduced the concept of the Anthropocene era, or the “Era of Man”, a concept which other scientists also investigated. Crutzen highlighted the problem of ongoing changes that represent a true human-induced planetary emergency: a crisis generated by intense, rapid introduction of pollutants into the biosphere. Crutzen paid particular attention to the increasing concentration of greenhouse gases in the atmosphere, especially carbon dioxide. The main cause of the climate crisis is the use of fossil fuels such as coal, oil and natural gas as energy sources. This practice has grown considerably since the Industrial Revolution. Earth is becoming much warmer than at the beginning of human civilisation, and this process grows exponentially, generating ever more unpredictable effects, such as climate disruption, on human activities. Human beings are losing the ability to foresee and prevent environmental disruptions, and this represents a risk for the entire planet.

These critical points are also highlighted by Dilip Konderpudi and Ilya Prigogine [19].

Rachel Carson argued that human beings are losing the ability to foresee and prevent and this represents a risk for the entire planet. [20].

In support of these global issues, authoritative researchers listed and measured the nine fundamental planetary boundaries to keep Earth’s system in balance and enable human beings to survive: climate change, oceanic acidification that threatens marine species, stratospheric ozone depletion and the consequent lower protection from harmful ultraviolet radiation, atmospheric aerosol that damages the lungs, biogeochemical flows’ interference with nitrogen and phosphorus cycles that causes eutrophication, excessive exploitation of global freshwater resources, change in land use and deforestation, rate of biodiversity loss and chemical pollution caused mainly by industrial activities. Three of these limits (climate change, rate of biodiversity loss and biogeochemical flows’ interference with nitrogen and phosphorus cycles) have already been exceeded. Therefore, a profound transformation of the economic and productive system is urgently needed [21].

Some economists, taking up the proposals of Goergescu-Roegen, go beyond opposing the market economy and suggest decreasing production. This is sometimes called sustainable degrowth or happy degrowth. This concept criticises economic indicators such as the gross domestic product (GDP) as measures of economic well-being. Instead, this model, formalised by the

philosopher Serge Latouche, foresees development based on an economic strategy focused on environmental problems and local production [22]. Proponents of degrowth criticise modern societies because their massive consumption of non-renewable resources does not account for the environmental damage caused by their growth. In addition, they neglect social welfare (social, family relationships, democracy, welfare, etc.) and environmental (air quality, biodiversity, etc.) factors and distribute the world's resources unequally. Supporters of degrowth propose a model based on social equity, sustainability and ecological footprint [1].

In the 1970s, environmental issues came to the attention of governments in a detailed and specific manner at world conferences. In June 1972, the United Nations conference on the “human environment” was held in Stockholm [23] and was followed by conferences on population (Bucharest 1974) [24], habitat (Vancouver 1976, Cairo 1984, Cairo 1994 and Istanbul 1996) [25]-[26]-[27]-[28], water (Mar del Plata 1977) [29], desertification (Nairobi 1977 and Paris 1994) [30]-[31] and “environment and development”(Rio de Janeiro 1992) [32]. These conferences were followed by various attempts to reach agreements to stop or slow climate change and the loss of biodiversity. The World Summit on Social Development was held in Copenhagen in 1995 [33], and in 2002 [34], the United Nations organised the Johannesburg conference on sustainable development [35], which was followed by a 2012 conference on the same theme in Rio de Janeiro [36]. Since 1995, the United Nations has organised a climate change conference every year [37]. The most important of these was the 1997 Kyoto conference, at which an important protocol was signed [38].

Today's globalised world must change. In 2015, the United Nations approved the 2030 agenda for sustainable development, whose 17 goals form a universal scope, divided into 169 specific targets, –or Sustainable Development Goals (SDGs) that all 193 member states must undertake to end poverty and inequality and achieve social and economic development. The *Sustainable Development Report* is the first worldwide study to assess where each country stands with regard to achieving the Sustainable Development Goals. The SDGs represent the continuation of the 2015 Millennium Development Goals (MDGs) completed in 2015 [39].

Religions have also addressed the problem of ecology. Pope Francis, in his encyclical “*Laudato sii*”, published May 24, 2015, highlights all of our planet's environmental problems with a Christian vision. He proposes strengthening the dialogue with all actors (economic, political, social and religious) and suggests a new reflection on our beliefs and lifestyles toward greater respect for the environment. He also talks about poverty, economic and social inequalities and the poorer classes and populations, which often suffer from the environmental degradation caused by richer countries [40].

Even the Dalai Lama has often addressed the problem of environmental degradation. He has said that the environment is a gift and that we must respect the natural cycles, and he has highlighted the environmental problems caused by humans, particularly climate change [41].

Numerous references to respecting the environment are found in Islam (Corano Sunna, Hadit) and among scholars of Islamic environmentalism, as well as in the precepts of Eastern animist religions [42].

Since 1986 until today there are some meetings in Assisi, Italy, representatives of Christianity, Judaism, Islam, Buddhism, Hinduism, Baha'i, Jainism and Sikhism, together with representatives of the World Wide Fund for Nature (WWF), presented a statement on the principles of their religions in relation to the environment and ecology [43].

### 3. CONCLUSION

Economic rules can no longer be dictated solely by the market because the planet's variable physical limits play a decisive role which must be taken into account. It is necessary to change the current development model because nature cannot maintain the biosphere's balance independently. Nature's historical capacity to regenerate itself is now influenced by human beings, who must take this into account for their own survival. The current development model cannot guarantee uncontrolled growth due to the scarcity of resources and worsening environmental degradation. Even traditionally "non-economic" natural resources now have a price. For example, even air is not free; it has a market, as well as global rules that must be established and respected (for example, emissions trading).

This paper illustrated the doubts that have arisen among many factions since the emergence of the modern economy. These doubts have grown as the use of resources has become more difficult and led to real market failures, such as the 1929 crisis, the 1973 oil crisis and the 2008 derivatives bubble. Today, human beings influence important natural cycles worldwide. Many choices are beyond the reach of national governments and require a common international effort to which we must respond with new and global power centres that support a more critical economy based on respect for human beings and the environment.

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We dedicate this paper to Giorgio Nebbia, a distinguished scholar of ecology, died recently.

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# ESTABLISHMENT OF THE ALIMENTARY FUND IN THE FEDERATION OF BOSNIA AND HERZEGOVINA

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**Abstract:** *The Alimentary Fund in the Federation of Bosnia and Herzegovina is a topic that has drawn the attention of the public for the last five years in the Federation of Bosnia and Herzegovina. During the 100<sup>th</sup> session of the Federal Government, more precisely on the 19<sup>th</sup> February, 2014, the Federal Ministry of Finance, in cooperation with the Federal Ministry of Justice and the Federal Ministry of Labour and Social Policy, has been assigned the role of considering the possibilities for establishing an alimony fund and submitting a proposal to the Government for the solution of this problem. The problem itself arises from Article 237 of the Family Law of Federation of Bosnia and Herzegovina, which is characterized as insufficiently clear, resulting in the need to construct a sub-legal act that will deal in more detail with the issue of how to secure funds from the Federation of Bosnia and Herzegovina Budget intended to support a child, with the aim of clarifying determination of jurisdiction. The Family Law of Federation of Bosnia and Herzegovina in Section V, concerning support, elaborated in detail all aspects of support, including the maintenance of a child assigned to one parent for care and upbringing. As the non-payment of alimony has been established as a criminal offense, the question arises as to why there is a need for the so-called „alimentation fund” at the federal level? Will this fund be used by parents who are unable to pay for alimony or by single parents? Will the legislator take over the obligation to prosecute individuals who do not pay alimony, and weather will the collection of obligations, according to the enforceable document, be by the means of seizure of real estate in a procedure of forced collection?*

**Keywords:** *Alimentary fund, Family Law, Alimony, Support, Social welfare centre.*

## 1. INTRODUCTION

The very term and concept of alimony embodied in our spoken language comes from the English word *alimony*, which indicates the term of financial support of one spouse after the divorce in which the underage children were acquired. However, our legislator is not familiar with the term alimony, but rather the term of support. The Family Law of the Federation of Bosnia and Herzegovina in Article 213 states that „Mutual support of marital and common-law partners, parents and children and other relatives is their duty and right which is provided in this Act”. Additionally, it is stated that „in cases where the mutual support of the persons referred to in paragraph 1 of this Article cannot be fully or partially realized, the social community shall, under the conditions laid down by law, provide uninsured members of the family with the necessary means of subsistence.” (Article 214 of the Family Law, hereinafter: The Law). This paper deal with the issue of the Alimentary Fund, which should have been established five years ago. At the 100<sup>th</sup> session of the Federal Government, more precisely on 19 February 2014, the Federal Ministry of Finance, in cooperating with the Federal Ministry of Justice and the Federal Ministry of Labor and Social Policy, were tasked to consider the possibilities for the formation of the child support or Alimentary Fund and to submit a proposal for a solution to the formation of the Alimentary Fund found within the territory of the Federation to the high Government. This

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position of the Government derives from the inability to interpret Article 237 of the Family Law of the FBiH (Federation of Bosnia and Herzegovina), which reads: „*In cases when a court finds that parents and other persons obliged to provide support are unable to meet the child's support needs, they will inform the guardianship authority, which is obliged to provide the means to support the child from the budget of the Federation*”.

The paper deals with whether such a Fund should indeed be in the territory of the Federation of Bosnia and Herzegovina and whether the legal solutions provided by the Family Law are adequate.

## 2. PARENTAL CARE

Sustenance of the child is the responsibility of every parent. This obligation ceases when the child reaches the lawful age of adulthood or the maximum to 26 years if the child is an attendant in regular education. When it comes to child support, it is primarily about the obligations arising from the concept of parental care. The lawmaker has defined parental care in Chapter C. sub-section 2 of the Family Act in Article 129. „Parental care is a set of responsibilities, duties and rights of parents with the aim of protecting personal and property rights and interests.” From the legal definition it can be recognized that the contents of parental care are rights and duties that relate to: the personality of the child, child representation and the property of the child. Parents' rights and duties according to the child's personality are a significant part of parental care. It consists of the following rights and duties towards children: designation of a personal name, custody and raising of a child, education of a child, child support and representation of a child. Sorted into categories, only the part relating to the designation of a personal name falls in the second category where it is legally defined conditions for the personal name of the child, while the other categories are in part related to the care of the child.

The act of parental care is performed by parents who work together and agree when they lead a common life, but also when they do not lead a common life if they conclude an agreement on joint parental care and if the court finds that the agreement is in the best interest of the child. The very concept of „common guardianship” or joint parenting is a newer date, and it implies understanding and arranging parents about those issues that are related to children. Parents here physically share all the daily routines and activities they have with their children, such as taking children to school or dormitory, sports, shopping, music school etc. To make this concept the best way for a child, it is necessary for parents to have a good relationship with each other and that their work is coordinated so that they can agree about taking over and respect each other.

What happens when one parent does not behave in coordination to parental care? In that case parental care is retracted. The deprivation of parental care is the toughest family-legal sanction imposed on parents to protect the personality, rights and interests of the child. In our legislation there are two basic reasons for the total deprivation of parental care (Article 154 of the Act). It primarily refers to the abuse of rights and the gross neglect of duties from the contents of parental care. That is why the deprivation of parental care has the same legal and moral consequences. Abuse of parental care means such damaging behavior of a parent when parent's actions contradict the interests of the child to the extent that his physical, emotional, moral and intellectual development is seriously compromised. The legal definition of abuse of parental care reads: „Abuse of rights exists especially in cases of bodily and mental violence against a child, sexual exploitation of a child, referring a child to socially unacceptable behavior, and gross violations



of the child's rights in another way." It does not leave any doubt that legislator has set as a priority when it comes to abusing parental care. In the legal definition, the parent will, in addition to the confinement of parental care, also be held guilty of criminal sanction. The gross neglect of parenting duties (Article 154, paragraph 3 of the Act) exists when the parent does not care about the child at all, nor does it meet his basic living needs in terms of nutrition, treatment, hygiene, etc. The legislator was more concerned with other causes: *„There is a gross neglect of duty especially in cases where a parent does not fulfill the obligation to support the child for more than three months, does not abide by earlier measures to protect the child's rights and interests, does not prevent the child, younger than 16 from enjoying alcoholic beverages, drugs or other illicit on late night outings."* So, from the same provision should it be said whether parental care will be taken away from a parent who has not paid child support or alimony? Yes, of course it should, because the act of not paying child support and alimony is a criminal offense. In addition, for parents who exercised parental rights it will facilitate exemption in the representation of a minor child, especially in the preparation of travel documents for the child, because there would not be a need for the consent of parents deprived of parental care.

### 3. DIVORCE AND DETERMINATION OF MAINTANANCE

Under the Family Law, the marriage is divorced if marital relations are difficult and permanently disrupted (Article 41 of the Law). Before starting a divorce proceeding, a spouse or both spouses who have children over whom they have parental care are obliged to apply for mediation to a legal and legal entity authorized to mediate. During the mediation process, a person authorized to be a mediator will try to match his / her partner. If the spouses are not in the process of mediation, the authorized person will endeavor to agree on who will live with their child or child over whom they are entitled to parental care after the age of majority, about their personal relationship with the parent they will not live with, his maintenance and other contents of parental care (Article 50 of the Act). In the event that the spouses do not agree with whom the child will live, the guardianship authority will decide on the child's place of residence and determine the monthly amount of the allowance until the court finishes the proceedings. The importance of support for young children gained in marriage is apparent from the provision that the waiver of the right and duty of maintenance has no legal effect (Article 213, paragraph 3 of the Act). It is also necessary to note that a parent who does not exercise parental care, or who is confined or confined to parental care, does not relieve the duty of child support (Article 218 of the Act). In court proceedings, the court will determine the total amount of funds required for maintenance. When determining the needs of a person in need of maintenance (in the particular case of a parent with whom children are living), the court will take into account their property status, ability to work, employment opportunities, health status and other circumstances on which the assessment of their needs depends and when determining the ability of a person who is required to provide support, the court will take into account all its benefits and real opportunities to earn increased earnings, as well as its own needs and legal obligations to support. Since the court in the case of child custody in most cases is fond of mothers of children, it follows that it takes into account the number of children in the community with the mother, whether the mother is employed, the property of the mother (whether she owns a house, flat, ), the age of the children, whether the children go to kindergarten or school etc. One of the provisions of the Family Law provided for by Article 284 (2) is that *„the guardianship authority shall, at the request of the court, collect and examine information on the personal and family circumstances of the child and the parties in the proceedings and the property of the parties, and in particular, real state"*. From all of the above, it can be concluded that the Law is well-regulated as the procedure of divorce, as well as the procedure for determining the maintenance.



#### 4. REJECTION OF PAYMENT OF MAINTENANCE

When the notion of the payment of support (alimony) is brought up, the public is of the opinion that most of the former spouses do not pay for support. Such claims are corroborated by numerous Internet sources, newspaper articles and the like. According to the Women's Network portal, „No one has so far dealt with this issue seriously, and it seems that single-parent families are growing in proportion to the number of parents who do not pay for child support or are not regular in paying alimony.” But is that all so? Do the perpetrators use all legal possibilities?

In the Federation of Bosnia and Herzegovina, a number of regulations regulate the area of support, including its own payments. The first regulation regulates the way of exercising the right to support, which is the FBiH Family Law. For the sake of sensitive matter and clarification, and easier handling of a variety of regulations governing maintenance, Chapter IX of the Family Law refers to Execution and Maintenance Procedures for Support. Article 372 of the Law states that: „If a parent who, on the basis of a final court decision or settlement made before the guardianship authority, is obliged to contribute to the maintenance of a child, fails to fulfill his obligations for more than three months, the guardianship authority shall, at the proposal of the other parent or the official if deemed to have endangered child support, take measures to secure the means of temporary support until the parent, the taxpayer begins to carry out his duties again.“ The basis for this is found in the Law on the Basis of Social Protection for the Protection of Civilian Victims of War and Protection of the Family with Children (Official Gazette of FBiH, No. 36/99, 54/04, 39/06, 14 / 09,45 / 16), according to which persons and families have the right to permanent financial and other material assistance, if they meet the conditions: they are incapable of work, i.e. they are prevented from exercising the right to work, that they do not have sufficient income for maintenance, that there are no family members who are legally obligated to support them or if they have them, that those persons are unable to carry out the obligation to support them (Article 22). In the sense of this Law, a child who is not capable of work or is prevented from exercising the right to work is considered a child up to the age of 15 years, and if at the regular schooling up to 27 years of age are completed (Article 23).

The second regulation is the Law on Execution of the FBiH (Official Gazette of FBiH, no. 32/2003, 52/2003 - exp., 33/2006, 39/2006 - correction, 39/2009, 35/2012 and 46/2016 and „Official Gazette of FBiH”, No. 42/2018 - decision of the Constitutional Court). In order to be able to enforce the enforcement procedure regarding maintenance, it is necessary to have an executive document. The executive document is a procedural and legal basis for the initiation of enforcement, i.e. an executive document is a document containing a legal act that determines the existence of a claim. The property of the executive document has only those documents that recognize this property status (Čalija B., 2000). In the concrete case, it is a judgment on the divorce that specifies the amount of money for the maintenance of a minor child. In the literature, in view of the legal nature of the enforcement claim, two basic types of enforceability are distinguished: execution for the purpose of exercising monetary receivables and enforcement in order to make non-cash receivables. Enforcement for monetary claims is divided according to the subject of execution for execution on movable property, execution on monetary claims, execution on claims for surrender or delivery of movable property or transfer of immovable property, execution of real estate and execution on public funds (Čalija B., 2000). The most common type of execution in maintenance is execution on the debtor's salary. When it comes to money claim, that is, the debtor's salary, according to Article 138, execution can be carried out on: salaries, compensations instead of salary, compensation for part-time work and compensation for salary

and pension deduction, compensation based on physical impairment under the regulations on invalidity insurance, income from social assistance, income from temporary unemployment, income from child allowance, scholarship and student benefits, and remuneration for the work of convicts can be carried out up to the amount of one half. Regardless of a change in workplace, or an increase in remuneration, or the introduction of a new right of the executor, the obligation of the former employer to inform the new employer of the enforcement on the salary of the perpetrator. According to the abovementioned enforcement requestant, it may propose that the court in the enforcement procedure order the employer to pay him all the installments he has failed to suspend and pay according to the enforcement order (Article 163). According to unofficial statistics from the Internet sources, it is stated that as many as 80 percent of cases the parent avoids paying alimony. „A work that is hard to prove and punished, which makes one-parent families difficult to live.” The question arises as to whether all remedies have been exhausted to make this claim irrelevant.

When there is no possibility of forcible execution of funds, i.e., an administrative ban or a court ban, then the execution procedure on movable and immovable things is initiated. The legislator explicitly stated that the subject of execution could be any debtor's or property right. In the event that the parent requesting enforcement is not able to initiate the procedure itself (which is very often in the Federation of BiH), the procedure should be initiated by the Center for Social Welfare, the guardianship authority ex officio, and as determined by Article 155 of the Family Law, where it is stated that everything can be done by the guardianship authority. *„The guardianship authority may at any time require parents to take into account the management of the child's property and the income generated for the child's needs. The guardianship authority may, in order to protect the child's property interests, decide that the parents have the status of guardians with regard to the management of the child's property. The guardianship authority may, in order to protect the child's property interests, require the court in the out-of-court procedure to determine the security measures on the property of the parent”*. In addition, Article 239 of the same Act obliges the guardianship authority, on behalf of a minor child, to initiate and conduct a procedure for awarding or increasing the maintenance, if the parent with whom the child lives without justified reasons does not exercise this right, and if the parent does not request execution of the decision on the maintenance, as referred to in paragraph 2. In the same Article, the guardianship authority shall, on behalf of a minor child, file a motion for enforcement with the court. The guardianship authority keeps records of decisions and agreements on the maintenance of children and parents in accordance with the instructions prescribed by the Federal Minister of Labor and Social Policy, and checks the fulfillment of the obligation to support the child and, in order to protect the interests of the child, take measures from the Law if it determines that this obligation is not fulfilled or not fulfilled wholly. According to all of the above, it is evident that the guardianship authority plays the most important role in recording and controlling the maintenance of a minor child.

In the Criminal Code of the Federation of BiH, in chapter twenty, criminal offenses against marriage, family and youth, Article 221 determines the violation of family obligations to leave someone in a gross violation of their legal family obligations in a difficult position of a family member who is not able to take care of himself, shall be punished by imprisonment for a term of three months to three years. Furthermore, Article 223 of the Law, designated as avoidance of maintenance, reads as follows: it is determined that the person who avoids the provision of support for a person who is obliged to support, based on an executive court decision or executive order made before another competent authority, shall be punished by imprisonment for a

term not exceeding three years. The lawyer did not leave a dilemma. In case of non-payment of support, imprisonment was imposed, but he also left the possibility of imposing a suspended sentence on conditional conviction at the moment of settlement of the due obligations (Article 223, Paragraph 2 and 3 of the Criminal Code of FBiH).

As the UN Convention on the Rights of the Child is directly applicable in Bosnia and Herzegovina, in accordance with the Constitution of Bosnia and Herzegovina, in the segment of child support, Article 27, paragraph 4 of the Convention stipulates the obligation of States Parties to take all appropriate measures to ensure that the child obtains support from parents or other persons who have financial responsibility for the child, both in the State party and abroad. If a person with financial responsibility for a child lives in a country other than the country where the child is living, States Parties shall encourage access to international agreements or the conclusion of such agreements, as well as the conclusion of other appropriate arrangements.

## **5. THE ESTABLISHMENT OF AN ALIMENTARY FUND**

„With the establishment of the Alimentary Fund, the state takes on the obligation to pay for alimony, and thus enables a safer and more stable life and development of the children of divorced parents” (eu-monitoring.ba, 2019), is just one of the numerous titles from the Internet portal dealing with the topic. Not even five years after the initiative adopted at the 100<sup>th</sup> session of the Federal Government, no proposal was made on how to find funds for the payment of alimony. And representative questions that were sent on January 25, 2019. The Government of the Federation of BiH, as well as the ministries that the Government charged in February 2014, which refers to the amendment to Article 237 of the Family Law of the Federation of BiH („Official Gazette of the Federation of BiH”, no. 35/05, No. : 31/14), whose regulation would be a step towards establishing an Alimentary Fund, remained unanswered. This parliamentary question asked the Government of the Federation of Bosnia and Herzegovina to provide information whether any solution to the issue was reached and in which phase it was the drafting of secondary legislation that should regulate in more detail the manner of financing the Alimentary Fund. Also, it was required to provide information on whether the Ministries in charge of considering the amendment of Article 237 of the Law took into account the ombudsman’s recommendations, whether the possibility of comprehensive research and the database and needs of single-parent families and single parents, as well as the possibility of increasing the number of social centers, given that the Federation of BiH submits 1,000 requests for divorce monthly (eu-monitoring.ba, 2019). An agent in the House of Representatives of the Parliament of the Federation of BiH, who asked the question, should have known that the Centers for Social Welfare were obliged to keep records in accordance with Article 242 of the Law, and that the Federation of BiH currently has 59 Centers for Social Welfare, 22 Social Welfare Services with 803 persons are employed and 32,574 users are endangered by a family situation classified by categories (children without parents 471 children of unknown parents 34 children abandoned from parents 500 children of parents prevented from performing parental duties 518 children of parents deprived of parental rights 72 children of parents who do not have enough income for maintenance / maintenance 22,423; children whose parents ignore or abuse 1,441; children whose development is impeded by family / family circumstances 4,803; children negatively neglected and neglected 2,312) (Federal Bureau of Statistics - Bulletin 2018). When looking at the countries in the region, the solution of the Alimentary Fund was most appropriately resolved by the Republic of Croatia by adopting the Law on Provisional Maintenance. The novelty enacted in the Act is that grandparents are obliged to pay temporary support if they are listed in an executive document. Such at-

titude and opinion of the Lawyer is entirely justified on the grounds that they are grandchildren in the second hereditary order, or even the first one in the case of the death of one of the parents or indecencies and wastefulness of the successor in the first order.

The Law on the Basis of Social Protection, Protection of Civilian Victims of War and Protection of the Family with Children, in Chapter VI, stipulates in article 98 paragraph 1 that a fine of 500 to 1,000 KM shall be punished for misdemeanor of the institution if the user, contrary to the provisions of this of the law, denies or restricts the rights to which it belongs, and „for the offense referred to in paragraph 1 of this Article, a responsible person in the institution shall be punished with a fine of 100 to 400 KM”.

## 6. CONCLUSION

After a detailed analysis of the Family Law of FBiH, the Law on the Basics of Social Protection, Protection of Civil Victims of War and Family Protection with Children, FBiH Law on Executive Procedure and FBiH Criminal Code, it can be concluded that the Alimentary Fund on the territory of the Federation is not necessary or purposeful. The legislator has determined in detail and precisely the competencies, and the guardianship authority has appointed to implement the procedure for collecting support in case the parent who is the legal representative of the child does not initiate the enforcement procedure. It can be concluded that the cause of all problems in non-payment of maintenance is exclusively the Social Welfare Center, which does not perform the work within its jurisdiction. It is made clear that initiatives launch for the creation of the Alimentary Fund is appealing to parents who are in situations that cannot collect child support, and trust in the help of the Federation. Unfortunately, the associations that are formed do not know enough legal regulations. Bosnia and Herzegovina is obliged, through its services, to ensure that the child receives support from parents or mothers who have financial responsibility towards the child. By imposing a fine for a misdemeanor of the institution and a responsible person in the same who deprives or restricts his rights with his nerd, the level of responsibility of the Center for Social Welfare has been clearly established in the Federation of BiH in case of violation of the right to exercise child support.

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# EU ACCESSION EXPERIENCE AND PERSPECTIVES: THE CASE OF SLOVAKIA AND BOSNIA AND HERZEGOVINA\*

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**Abstract:** *On 1 May 2019 the European Union marked 15 years since the gradual launch of its (South-) Eastern enlargement oriented on Central, Eastern and South-Eastern Europe as well as Mediterranean states. SCHIMMELFENNIG [5: 186-188] reminds us that “in early 1990, the EC [as a predecessor of the European Union encompassing twelve members – authors’ remark] proposed to conclude association agreements without referring to, let alone promising, future membership. [...] Furthermore, the EC as a whole, and some of the reticent members in particular, used diverse delaying tactics to deflect the CEECs’ [Central and Eastern European countries’ – authors’ remark] demands for full membership. On the one hand, they were offered alternative arrangements like French President Mitterrand’s “European Confederation” or Prime Minister Balladur’s “Stability Pact” for Europe as well as several ideas of “membership light” (that is, excluding the more cost-intensive Community policies). On the other hand, the urgency of other issues (such as the ratification of the Maastricht Treaty on European Union or accession negotiations with the EFTAns [additional European Free Trade Association aspirants for the EFTAn enlargement, having “reversed their initial decision to stay out of the common market” [6: 186] – authors’ remark]) has often provided a welcome opportunity to place the issue of Eastern enlargement at the end of the agenda”.*

*Recently, “urgency of issues” could be linked to the post-crisis Roadmap for a More United, Stronger and more Democratic Union targeting the European Union’s (EU) democratic, institutional and policy framework, or the pending withdrawal [alias Brexit] negotiations with the United Kingdom; yet, in February 2018 the European Commission “reaffirmed the firm, merit-based prospect of EU membership for the Western Balkans in its Communication A credible enlargement perspective for and enhanced EU engagement with the Western Balkans” [7: 1].*

*EU enlargement symbolises a multidimensional “Europeanisation” process due to the spectrum of (frequently mutually incompatible) interests (that are subject to modification in the course of time) of a number of actors, as BAUEROVÁ [8: 204] puts it. In our article titled Visegrad meets Visegrad: the Visegrad Four and the Western Balkans Six (2015) we claimed that enlargement of the EU over the recent decade has not just expanded its territory or increased the headcount of its Single Market; by almost doubling the number of its members the Union faces multifaceted implications beyond any doubt. The CEECs, having been challenged by multiple transformation, assumed their rights just like*

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obligations associated with EU membership upon completion of transitional periods intended to allow for as much a smooth integration process as possible; EU accession reinforced their prestige internationally to the extent of intensity of their participation. Bearing in mind that the process of Europeanisation (alias “EU-isation”) could be EU-driven or domestically-driven [9: 8-9], our focus will be on the EU accession experience and perspectives in the case of the (among the Visegrad Group countries most integrated) Slovak Republic, and Bosnia and Herzegovina, respectively, in the light of the 2019 Communication on EU Enlargement Policy released on 29 May 2019.

**Keywords:** European Union enlargement, Europeanization, Western Balkans, Bosnia and Herzegovina, Slovak Republic.

## 1. INTRODUCTION

*“The high hopes of a decade ago that all the rest of Southeastern Europe would be members of the European Union by 2014, on the very centenary of the Sarajevo assassination, have been set aside. The prospect of yet another difficult decade looms ahead, for regional members as well as aspirants. [...] None of the regional governments favour abandoning the wider EU association in favour of isolation or a new special relationship. **Where the Europe these states have or hope to join as formally equal partners will itself proceed is, however, in question.** The EU’s own complex transition to an economic union has become a less settled prospect.”* LAMPE [10: 306 and 308].

A dozen of years ago, chapters of the monograph *Evropske integracije – mostovi ka Balkanu* (2006) titled “Politički aspekti evropskih integracija” and “Ekonomski aspekti evropskih integracija” gave insights into two opposing – yet mutually deeply and widely interconnected – spheres of the EU’s functioning. Their authors, namely M. VETRÁK [11] of the former and Z. MOGYOROSIOVÁ [12] of the latter, both explain the motives and origins for political as well as economic integration in the European context through different phases of their historical development and functioning: whilst M. VETRÁK analysed political aspects of European integration through the prism of EU legislation and the Union’s institutions/bodies, Z. MOGYOROSIOVÁ described economic integration with its main forms in terms of the theoretical framework as well as applied to the Union’s context, most notably through the customs union between the EU Member States (MSs), its internal market, and the economic and monetary union. In terms of the 1961 B. BALASSA’s *theory of economic integration*<sup>3</sup> intensifying bonds of economic nature from a free trade area upwards, it goes without saying that the *Central European Free Trade Agreement* played a significant role prior to accession of countries of Central and Eastern Europe to the European Union.

Following the *Visegrad* (alias the Visegrad Group) EU Presidencies, namely the 2009 Czech, and both the 2011 Hungarian and the 2011 Polish ones – as well as prior to the 2016 Slovak Presidency of the Council of the European Union – genesis of the 2004 Slovak EU accession<sup>4</sup> triggered contemplation represented by the following qualitative hypotheses: *whether the former Yugoslav Republic of Macedonia, Montenegro, and Serbia will sign the European Union Accession Treaty in the course of the [2016] Slovak EU Presidency*; and, *whether European Un-*

<sup>3</sup> Represented (with gradually intensifying integration) by: a free trade area – a customs union – a common market – an economic union – complete economic integration [13, reprinted from *The Theory of Economic Integration* in 14: 180-1].

<sup>4</sup> See [1: 438]

ion accession negotiations with Albania, Bosnia and Herzegovina, and Kosovo under UNSCR 1244/1999 (in line with the ICJ Opinion on the Kosovo declaration of independence) will have already been initiated by December 2016, respectively. As a result of the 2015 mid-term testing of the respective qualitative hypotheses in a two-year interval after the initial 2013 assessment the team of authors came to the conclusions that: “**Nonetheless, as in the initial 2013 assessment of the respective hypothesis<sup>5</sup>, we continue to reject it prior to the publication of the 2015 European Union Enlargement Package.**” [15: 107-108], and “**Nonetheless, as in the initial 2013 assessment of the respective hypothesis<sup>6</sup>, we continue to reject it prior to the publication of the 2015 European Union Enlargement Package despite promisingly unfolding regional cooperation within the Western Balkans region and related engagement in further development of bilateral relations with other enlargement countries and neighbouring EU Member States. ... [T]he respective recommendations will be reflected by the European Commission in its 2015 Enlargement Package (Enlargement Strategy and Main Challenges 2015-16), too.**” [16: 99], respectively.

Bearing in mind a sample of studies/reports carried out in the pre-/post-accession period ([7], [17] - [29]) and (resting on) a number of (our) earlier analyses ([1] - [3], [15] - [16], [30] - [49]) in the framework of the EU accession process, this follow-up paper aims to address the issue of the Slovak accession experience when reviewing status quo of the European integration process vis-à-vis Bosnia and Herzegovina in a “zoom-in”/“zoom-out” comparative perspective – with reference to recently released data – as well as challenges that lay ahead, taking into consideration the scope and limits of such analysis.<sup>7</sup>

## 2. FLEXIBLE ENDOGENOUS AND EXOGENOUS EUROPEAN INTEGRATION

The *European Economic Area* (EEA<sup>31</sup>) represents economic integration of *extra-EU* EFTA<sup>3</sup> (Norway, Iceland, Liechtenstein) countries with 28 EU MSs, while the timing of the UK’s withdrawal and related terms of UK cooperation with the post-Brexit EU27 continue to be subject to negotiation at the time this follow-up paper goes to press. Among the *intra-EU* Visegrad Group (Czechia, Hungary, Poland, and **Slovakia**) countries, **Slovakia** – having held its 2016 Presidency of the Council of the European Union – is fully integrated not just in the Schengen area, but even in the Euro area (*alias* EA19)<sup>8</sup>; the fact that all *extra-EU* EFTA<sup>4</sup> (Norway, Iceland, Liechtenstein, Switzerland) countries are incorporated in the *Schengen area*, and certain degree of *extra-EU* euroisation relates to the so-called “European microstates” is at the heart of *flexible endogenous and flexible exogenous integration of the European Union* referred to in an earlier chapter by D. ČIDEROVÁ & B. DIONIZI [3: 71 and 73]. With Slovakia having been selected as a benchmark in the 2008 World Bank study focused on *Western Balkan Integration and the EU*, we briefly look at the “Slovak success story” (as labelled by the OECD) in terms of EU accession experience before reflecting on the EU accession perspective of Bosnia and Herzegovina.

<sup>5</sup> Whether the former Yugoslav Republic of Macedonia, Montenegro, and Serbia will sign the European Union Accession Treaty in the course of the [2016] Slovak EU Presidency

<sup>6</sup> Whether European Union accession negotiations with Albania, Bosnia and Herzegovina, and Kosovo under UNSCR 1244/1999 (in line with the ICJ Opinion on the Kosovo declaration of independence) will have already been initiated by December 2016

<sup>7</sup> Cf. methodological pluralism claimed by N. HYNEK [50: 173], and in [51: 466f].

<sup>8</sup> The status of Bosnia and Herzegovina vis-à-vis the Euro currency in a comparative perspective was indicated in the earlier chapter [3: 73-74].

## 2.1. Eu Accession Experience: Focus on Slovakia

In the earlier chapter [3: 75], relativity of impact of Slovakia was illustrated through its 1.06% share in EU28 population, its 0.79% share in EU28 GDP, and its representation in voting of the Council of the European Union by up to 1.99% [2013 Eurostat est. cited in 22: 8]. And, Central European location of Slovakia, specified in Table 1 in Annex introducing basic facts about Slovakia and Bosnia and Herzegovina, in terms of “wider Europe”<sup>9</sup> continues to be complemented by the fact that as much as 94% of the Slovak borderline stand for the Union’s internal border [22: 28].

A decade after establishment of the Slovak Republic as one of two successors of the former Czechoslovakia in 1993 (Table 1 in Annex), Slovakia was involved in signing of the EU Accession Treaty on 16 April 2003. *“Having graduated from this trying [EU-accession] preparatory process [on a journey from “policy takers” to “policy makers”], the countries in “the class of 2004” are now full-fledged members of the European Union, with equal rights to participate in the policy process shaping its future.”*, i.e. further development of the *acquis*, as formulated by ERIKSSON – KARLSSON – TARSCHYS [53: 3]. Within “the class of 2004”, Slovakia was selected as a benchmark in the 2008 World Bank study titled *Western Balkan Integration and the EU: An Agenda for Trade and Growth* [18: 141] on the grounds that the Slovak Republic *“has set many of its economic and social policies wisely and, as of the end of 2007, has been proceeding strongly toward its goals with a much stronger track record on macro-economic stability than many of its neighbouring countries. It is of course true that there is no unique path to growth and development, but the Slovak Republic seems to be as good a role model as any in the immediate neighbourhood of the Western Balkans.”* The 2014 OECD Economic Survey of Slovakia presented the “Slovak success story” as follows: *“The Slovak success story has benefited mainly the western part of the country. GDP per capita in Bratislava is the 6<sup>th</sup> highest among 272 regions in the EU28 ..., although the country as a whole ranks only 20<sup>th</sup> out of 28 EU countries.”* [54: 7].<sup>10</sup>

As a matter of fact, in the course of a dozen (2004 – 2015) of EU membership years, the GDP per capita (in PPS, EU28 = 100) of Slovakia fueled by the catching-up process rocketed from 56% in 2004 to 77% in 2015 [59].<sup>11</sup> Figure 1 in Annex reveals extensive inconsistency in the rate of GDP per capita in PPS in Slovakia & Bosnia and Herzegovina when compared to the EA19 (EU28 being set as the standard at 100) in the 12-year time span<sup>12</sup> starting with the “Big Bang”

<sup>9</sup> Cf. [52].

<sup>10</sup> Cf. among 276 regions in the EU28 regional GDP per capita of the Bratislava region ranked: the 6<sup>th</sup> highest in 2014 [55], the 5<sup>th</sup> highest in 2015 [56], the 6<sup>th</sup> highest in 2016 [57]; and, following a change in methodology, regional GDP per capita of the Bratislava region was the 8<sup>th</sup> highest (2017) among 281 regions in the EU28 [58].

<sup>11</sup> Cf. “As a result of relatively higher GDP growth rates, CEE10 countries achieved significant real convergence vis-à-vis the EA12 between 2004 and 2014. The CEE10 average GDP per capita level in purchasing power standards (PPS) increased from about 50% of the EA12 level in 2004 to above 58% in 2008. After having declined somewhat in 2009, it increased gradually to some 64% of the EA12 level in 2014. However, there was a considerable cross-country variation with the pace of convergence in general inversely related to initial income levels. ... [R]elative GDP per capita levels in PPS increased by about 20 percentage points in Baltic countries, Poland, Romania and Slovakia”, where CEE10 and EA12 stand for: ten Central and Eastern European countries that entered Union in 2004 and 2007; and the Euro area in 2004, respectively [27: 2 and 7].

<sup>12</sup> In the case of Bosnia and Herzegovina data for 2004 are not available; 2017 updates (EU28 = 100): 106 (EA19), 76 (SK), 31 (BA). With regard to available data for Kosovo (UNSCR 1244/1999) covered in the earlier chapter [3] cf. reference to “available indicators as well as anecdotal evidence” quoted in [60: 6]. In its 2014 report the European Commission introduced that “GDP per capita reached € 2,800 in 2013, equal

2004 EU15-to-EU25 enlargement (followed by the 2007 EU25-to-EU27 and the 2013 EU27-to-EU28 ones). Although still being significantly below the EA19 average, SK GDP per capita in PPS demonstrates continuous upward or stable trend – even in the period of the global crisis during which the EA19 experiences minor contraction. Albeit incorporated into the EU-driven Stabilisation and Association Process, Bosnia and Herzegovina – still suffering from the hardship of the 1990s and not having settled yet – shows slow healing process when steadily moving towards 50% of the recent levels of GDP per capita in PPS registered by Slovakia (roughly an analogy to the SK standing vis-à-vis the EU average level in the advent of Slovak 2004 accession to the Union).

Functioning of *multi-level governance* in a broader context has been related not just exclusively to the European Union – it has also been dispersed to candidates and potential candidates for EU membership. M. A. VACHUDOVA [62: 65] claims that in the post-1989 era membership aspirants experienced both *passive and active leverage* (Table 2 in Annex) being exercised by the European Union (or its pre-Maastricht predecessor): passive leverage embodied in the mere existence of the EU with the Union's shared values, whereas its active counterpart encompassing tailor-made policy changes/adoption targeted at seizing the chance of becoming yet another “club” member. None of the mentioned leverages were caused by a deliberate action on behalf of the EU, moreover it is almost paradoxical that, for example, *asymmetric interdependence*, as part of active leverage and building upon its passive counterpart, has created self-imposed pressure among aspirants in their eagerness to join the European Union due to a somewhat lukewarm approach of some of the Union's Member States to its enlargement [62: 109-110]. In the case of EU accession states their compliance behaviour can be elucidated on the background of *legitimacy*<sup>13</sup> and *rationality* in a matrix (Figure 2 in Annex) – further structured in self-explanatory Figure 3 in Annex – along these lines.

Within three decades between 1990 – 2019 the EU has not just expanded to eastern *Bundesländer* – now embracing all of 16 German *Bundesländer* – but it has continued to grow in a series of enlargement rounds from 12 to 28 members, too. Consequently, earlier members have had a stake in the enlargement-related decision-making in later stages, i.e. 2004 entrants vis-à-vis countries acceding in 2007 and 2013. Particularly the case of ex-Yugoslavia is one of gradual integration with the EU, spreading from *Member State* (Slovenia; Croatia) through *candidate*<sup>14</sup> *country* (Republic of North Macedonia; Montenegro; Serbia) to *potential candidate status* (Bosnia and Herzegovina; Kosovo/UNSCR 1244/1999); worth mentioning is that the number of negotiated *acquis communautaire* chapters transformed from 31 (e.g. in the case of the 2004 EU enlargement) into 35 (e.g. in the case of the 2013 EU enlargement). Both Kosovo

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to 11% of the EU28 average” with observation that “a measure using purchasing power standards is not available for Kosovo” [61: 51]; alternatively, cf. its 2015 report [26: 43] with € 2,935 (in 2013).

<sup>13</sup> In the context of legitimacy of EU international relations, Ch. LORD [63] advises not to understand legitimacy as mere alternation of recognition, acceptance or support. He argues that EU citizens tend to approve procedures by which policies are made even when disliking them, especially bearing in mind the power that citizens have when shaping the ways of dealing with external issues in accordance to their own internal beliefs and values. Moreover, as taking place in the international arena, he warns that legitimacy is being contested by both, external and internal, spectators. In addition, the complexity of the EU and, therefore, its international legitimacy is often tempted by the fact that it can, but does not have to be assumed as legitimate by the outside audience. That being said, there is a clear implication of different dimensions of legitimacy that D. Beetham (1991, quoted by LORD in [63: 136]) distinguishes as: performance of the political system; popular identification with the system; and acquisition and exercise of power according to democratic values.

<sup>14</sup> Since 2014 candidate country status related also to Albania



(UNSCR 1244/1999) and Bosnia and Herzegovina being potential candidates for EU membership, emphasis will now be placed on the EU accession experience and perspectives as in the case of Slovakia and Bosnia and Herzegovina – on the background of: firstly, sovereignty in the Balkans; secondly, compliance behaviour among Balkan accession states; and thirdly, explaining the compliance behaviour in the Balkans.

## 2.2. EU Accession Perspective: Focus on Bosnia and Herzegovina

Claiming that delimitation of Europe as a so-called “pan-region” (or *macro-region*) represents a challenge particularly in the East, P. JUREK suggests addressing Eastern<sup>15</sup> Europe and South-Eastern Europe<sup>16</sup> adhered to by three civilisations<sup>17</sup> as transitional regions intersecting the rim of the Eurasian as well as the Middle-Eastern pan-regions [64: 309-12 and 395].<sup>18</sup> Similarly to diverse application of the multifaceted term *Balkan*<sup>19</sup>, historical and/or geographic interpretation associated with the SEE region varies, too.<sup>20</sup> Variability of internal dynamics specifically in the case of Serbia and Montenegro (2002-2006) and Kosovo (UNSCR 1244/1999) is outlined in Figure 4 in Annex; moreover, gradual progress towards EU membership in individual successors of ex-Yugoslavia (and ex-Czechoslovakia in a comparative perspective) is summarised in Table 3 in Annex.

In the preceding passage, a matrix of compliance behaviour on the background of *legitimacy* and *rationality* [62] with relevance to EU accession states was indicated. The aspect of *asymmetry* in the context of integration addressed by A. MORAVCSIK & M. A. VACHUDOVA (2003)<sup>21</sup> is formulated by the latter as: “[T]remendous benefits combined with the enormous requirements for joining the EU create incentives for compliance that are different in kind and trigger different mechanisms of domestic change in candidates than in existing members of the EU.” [62: 7]; the degree of compliance in terms of an interval stretching from non-compliance to substantial compliance of the Balkan accession states may be visualised on the background of Figure 5 in Annex. Having asked three pivotal questions in terms of costs of compliance and legitimacy: “Do the arguments based on cost-benefit calculations predominate the thinking of political actors in government?”; “What exactly is the balance in their consideration of gains and losses?”; “What is the degree of legitimacy accorded by domestic actors to EU demands?”, NOUTCHEVA [70: 28-29] placed in Figure 6 in Annex (as application of Figure 2 in Annex) countries considered in Figure 4 in Annex.

When presenting the 2014 EU Enlargement package, former European Commissioner for Enlargement and Neighbourhood Policy Š. FÜLE [71] stated: “Five years ago, we set out to strengthen the credibility and the **transformative power of enlargement policy**. We put a particular emphasis on three pillars: rule of law in 2012, economic governance in 2013 and this year [2014], we’re setting out new ideas to support public administration reform, and strengthening of democratic institutions. Today, this approach is bearing fruit. The process is credible and is bringing concrete results through reforms that gradually transform the countries con-

<sup>15</sup> In the area along the eastern border of the EU incl. Eastern Balkan countries

<sup>16</sup> Depicted in Annexes 1a-b in the earlier chapter [3: 101-102] together with the respective territorial visions and diasporas of local origin over time

<sup>17</sup> In the area of the Western Balkan countries

<sup>18</sup> Cf. [65: 147f].

<sup>19</sup> Cf. [66: 351f].

<sup>20</sup> E.g. cf. [67] - [69].

<sup>21</sup> Reference in [62]

cerned, improving stability in our immediate neighbourhood. It also makes the countries better prepared for the EU entry and for the responsibilities of the membership.”. Next, within the mandate of the new European Commission (since 1 November 2014) new High Representative for Foreign Affairs and Security Policy/Vice-President of the Commission F. MOGHERINI, and new Commissioner for European Neighbourhood Policy and Enlargement negotiations J. HAHN visited Sarajevo (vis-à-vis the case of Bosnia and Herzegovina documented in Table 4 in Annex) “to check if there was a level of engagement of commitment sufficient enough for us to want to engage in a process that could move Bosnia and Herzegovina closer to the European Union. The visit was extremely positive, we met with the presidency, we met with 12 political leaders in Parliaments, we met with civil society and we came to the conclusion that **,yes, there can be a new start for EU and Bosnia and Herzegovina’.**” [72]. Because in the earlier chapter [3] we referred to the 2004 accession<sup>22</sup> of Slovakia to the European Union, and approximation<sup>23</sup> of Kosovo (UNSCR 1244/1999) in the light of the EU *acquis communautaire*, with the adapted November 2015 “overarching medium-term strategy for EU enlargement policy”<sup>24</sup> we turned our attention in Table 5 in Annex to an articulate comparison of the state of play and (year-to-year)<sup>25</sup> progress made by Bosnia and Herzegovina just like Kosovo (UNSCR 1244/1999) at the point of time of the medium-term strategy for EU enlargement policy.

As “In November 2015, the European Commission set out a medium-term strategy for EU enlargement policy” [(endorsed by the Council of the EU in December 2015) for the 2015 – 2019 mandate of the European Commission] is the opening statement of the European Commission in its follow-up 2016, 2018 & 2019 editions of the *Communication on EU Enlargement Policy* ([7], [28] - [29]), this brings us to a summary and concluding remarks, which follow.

### 3. CONCLUSION

*“[T]he Western Balkans region is completely surrounded by the EU member states. Any event taking place in any country of the region has direct or indirect impact on all others – members or non-members. The European project will thus not be accomplished without bringing the countries of the Western Balkans into the EU family. It is an **Either-Or** case. Either they will endorse our standards or we will have to deal with quasi- or limited democracies. On the other hand, we fully understand the worries of EU citizens to go ahead with enlargement. Nevertheless, we also remember their uncertainty and even fear when we were to enter the Union. In the end, they proved to be unfounded.*

*Due to many complex events of recent years, countries in the waiting room slowly see the EU losing its power to be a major influential actor. But as long as those countries keep their faith in the European project, we have to keep ours in them. So, allow me one more **Either-Or** to make the case for more dynamics in the enlargement process. Either we will feed our neighbourhood with a positive agenda or they will feed us with its own one, usu-*

<sup>22</sup> In terms of: [30: 15-19], [73] - [75].

<sup>23</sup> In terms of: [76] - [77].

<sup>24</sup> Still, the European Commission will “continue to adopt annual communications to take stock of progress, draw conclusions, make recommendations on thematic or country issues and propose adjustments to the overall strategy as necessary” [26: 13].

<sup>25</sup> Mapping the status quo between October 2014 and September 2015, the overarching medium-term strategy for EU enlargement policy alias the 2015 EU Enlargement Strategy involves inter alia interaction with EU Member States and the governments of Bosnia and Herzegovina, and Kosovo (UNSCR 1244/1999), respectively.



*ally negative. Slovakia has invested a lot of efforts into the idea of a unified Europe with the Western Balkans' place in it. And I pledge to keep contributing to accomplishing this vision rather sooner than later."* M. LAJČÁK [78].

The EUROPEAN COMMISSION [26: 2] having stated in its medium-term strategy for EU enlargement policy released in November 2015 that "[w]hile there has been important progress by many countries in many areas over the past year, the challenges faced by these countries are such that none will be ready to join the EU during the mandate of the current Commission, which will expire towards the end of 2019", the COUNCIL OF THE EU [80: 2] then voiced the following December that "[i]n line with the renewed consensus on enlargement approved by the European Council on 14 and 15 December 2006, and the Council conclusions of 16 December 2014, the Council reiterates that enlargement remains a key policy of the European Union and an investment in the peace, democracy, prosperity, security and stability of our continent. In this context, the Council reiterates the EU's unequivocal commitment to the European perspective of the Western Balkans."

With the EU enlargement having been one of the priorities of the 2016 Slovak Presidency of the Council of the EU, according to the Minister of Foreign and European Affairs of the Slovak Republic M. LAJČÁK [78] recent progress achieved by **Bosnia and Herzegovina**<sup>26</sup> provided enough arguments for putting its membership application on the September 2016 General Affairs Council agenda – in case of a decision tasking the European Commission to prepare its opinion on the application such preparation of the *avis*<sup>27</sup> would serve as a *leverage*<sup>28</sup> rather than a reward.<sup>29</sup>

The COUNCIL OF THE EU [82] "*reaffirms its commitment to enlargement, which remains a key policy of the European Union, in line with the renewed consensus on enlargement approved*

<sup>26</sup> Cf. "The Commission concluded that Bosnia and Herzegovina is back on the reform track and has started to address the outstanding priorities on its EU accession path." [79] and "The Council welcomes that Bosnia and Herzegovina is back on the reform path necessary to move forward in its EU integration process." [80: 16].

<sup>27</sup> Cf. [81: 133].

<sup>28</sup> Cf. [62: 65 and 108-109].

<sup>29</sup> Cf. the statements vis-à-vis Kosovo (UNSCR 1244/1999) by the European Commission ("On 27 October 2015, the EU signed a Stabilisation and Association Agreement (SAA) with Kosovo. This is a milestone on Kosovo's path towards a European future. The SAA constitutes the first contractual relationship between the EU and Kosovo. It completes the map of SAAs with all Western Balkan countries. The SAA provides a comprehensive framework for closer political dialogue and economic relations between Kosovo and the EU, including opening EU markets to Kosovo products. Kosovo has demonstrated its commitment to the normalisation of relations with Serbia by reaching a number of key agreements" [25: 4]); the COUNCIL OF THE EU ("The Council takes good note of the signing in October [2015] of the Stabilisation and Association Agreement (SAA) with Kosovo. This EU-only agreement is the first comprehensive agreement between the EU and Kosovo. Its forthcoming conclusion, entry into force and implementation is without prejudice to Member States' positions on status. [...] The Council's intention to resume discussions on a framework agreement allowing Kosovo to participate in European Union programmes is without prejudice to Member States' positions on status" [80]) as well as the 2016 Slovak Presidency of the Council of the EU ("In Kosovo the Stabilization and Association Agreement entered into force. It represents a most tangible opportunity for Kosovo's further progress in its European perspective. Now the focus should be on its early implementation. [...] Let me underline that the normalization of relations with Belgrade simply has no alternative", LAJČÁK, 2016). À propos, the European Commission declared that "[t]here are no official relations with Kosovo, as Bosnia and Herzegovina does not recognise Kosovo as an independent state" [24: 29]) and "[t]here are no official relations with Bosnia and Herzegovina as the latter does not recognise Kosovo's independence" [25: 28].

by the European Council on 14 and 15 December 2006 and subsequent Council conclusions”. In our timeline of ex-Yugoslavia and ex-Czechoslovakia in a comparative perspective (1990 – 2019) vis-à-vis EU accession (displayed in Table 3 in Annex) readers certainly noticed repeated “*unconditional recommendation to open accession negotiations*” by the EUROPEAN COMMISSION in the case of the former Yugoslav Republic of Macedonia (FYROM)/Republic of North Macedonia<sup>30</sup> as a follow-up of such Commission’s annual recommendations between 2009 – 2014; the COUNCIL OF THE EU applauded “*the historic and unprecedented Prespa Agreement, and the Treaty on Good Neighbourly Relations with Bulgaria*” in its *conclusions on enlargement and stabilisation and association process* (General Affairs Council meeting on 18 June 2019).

In a nutshell: “[r]eaffirming its conclusions of 26 June 2018, the Council takes good note of the Commission’s recommendation to open accession negotiations [with both the Republic of North Macedonia as well as Albania] based on its positive evaluation of the progress made and of the fulfillment of the conditions identified by the Council. In light of the limited time available and the importance of the matter, the Council will revert to the issue with a view to reaching a clear and substantive decision as soon as possible and no later than October [2019]”.

Under the SAP heading alike, having taken note of the EUROPEAN COMMISSION’s *Opinion*<sup>31</sup> on Bosnia and Herzegovina’s application for membership of the European Union “[t]he Council will continue to examine this document thoroughly and revert to the matter later this year”. In the case of Kosovo (UNSCR 1244/1999) the Council “*reiterates the importance of the continued implementation of the Stabilisation and Association Agreement (SAA) with Kosovo. This EU-only agreement, which is without prejudice to Member States’ positions on status, provides the contractual framework between the EU and Kosovo. [...] The Council deeply regrets the decisions by the government to impose unilateral tariff increases of up to 100% on imports from Serbia and Bosnia and Herzegovina in November 2018, in violation of Central European Free Trade Agreement (CEFTA) obligations and of the spirit of the SAA, as well as the imposition of non-tariff barriers. The Council reiterates that these decisions undermine regional cooperation, including the Regional Economic Area, and must be immediately revoked.*” [82]. In the framework of accession negotiations (2025 accession outlook) with Montenegro (32 out of 35 negotiating chapters opened and 3 provisionally closed so far) as well as with Serbia (16 out of 35 negotiating chapters opened and 2 chapters provisionally closed so far) overall progress was made.<sup>32</sup>

<sup>30</sup> “North Macedonia not only continued its ambitious reform agenda, but also reached a historic agreement with Greece resolving a 27-year old name dispute. This, together with the bilateral agreement with Bulgaria, is an example of how to strengthen good neighbourly relations for the entire region, and testimony to the power of attraction of the European perspective.” [29: 1-2].

<sup>31</sup> “Bosnia and Herzegovina’s accession would have a limited overall impact on European Union policies and would not affect the Union’s capacity to maintain and deepen its own development. At the same time, identified functionality issues within Bosnia and Herzegovina, notably related to the internal decision-making process as well as uncertainty and overlaps between the country’s various levels of government over a number of competences could negatively affect the decision-making process at EU level, particularly for matters requiring unanimity amongst EU Member States. Bosnia and Herzegovina should therefore engage in a process to address functionality issues in order to comply with EU membership requirements and take on its related obligations.” [29: 20]. See also reference to public administration in Bosnia and Herzegovina as “a labyrinth of pre-war, wartime and post-war institutions, often exercising overlapping administrative authority” by GONZÁLEZ LÓPEZ [44: 17].

<sup>32</sup> NB: For CEECs “nearly 15 years had passed from their independence until accession; Croatia, the last state to enter the Union in 2013, already needed 5 more years, i.e. a full decade from its application for membership to accession. [...] For the negotiation with Croatia, the *acquis* has been split into 35 chapters;

F. SCHIMMELFENNIG & U. SEDELMEIER [9: 7] defined “Europeanization” as “*a process in which states adopt EU rules*”, and taking their view into account, J. WOELK [47: 29] comments that the transformation process of the CEECs has been characterised as “Europeanization” in order “*to express the voluntary and **endogenous** character of adaptation to the acquis communautaire and its implementation through reforms*”. As a matter of fact, Europeanisation has been associated with the transformative power of the EU throughout the respective EC/EU enlargement rounds, and even beyond them as e.g. L. BACIU [83: 123] claims that “*Croatia became the first of the seven countries from the Western Balkans to join the EU and it represents the best example of the EU’s transformative power in the region*”. Yet, on account of five paradoxes (namely: “sovereignty paradox”, “no-blueprint paradox”, “good will paradox”, “no-damage paradox”, “mirror paradox”) affecting the EU’s transformative power in the Western Balkans according to WOELK [47: 35-36], the EU’s transformative power in the Western Balkans has been, is being and will continue to be balanced on a scale with the “EU’s geopolitical competitors”<sup>33</sup>. Thus, let us briefly recall what in his former position of the High Representative of the International Community and the Special Representative of the European Union in Bosnia and Herzegovina, M. LAJČÁK stressed: “*We agreed that the Western Balkans is of all the closest to us. It is the target area of the European Union’s further enlargement. We are bound to it by the geographic, historical, and linguistic proximity.*” and continued: “*Slovakia still is a success story. It remains a motivation for the Western Balkan states, not an improbable role model for our geographically and mentally close co-members of the European Union.*” [84: 47-48 and 51]. Having attended the General Affairs Council meeting held in Luxembourg on 18 June 2019 in the position of the Minister of Foreign and European Affairs of the Slovak Republic, M. LAJČÁK as the OSCE Chairperson-in-Office visited Bosnia and Herzegovina on 20 June 2019. Acknowledging that “*[i]t is a reality that differences exist, but parties should look to the future*” and calling on national partners “*to take steps towards creating a positive political climate and moving away from divisive rhetoric*”, he encouraged to explore all avenues to get the country back on track, including through adoption of key reforms: “*[T]o make progress, political commitment, coherent and comprehensive strategies and uncompromised long term dedication are key.*” [85].

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more than 100,000 pages had to be translated. In 2010, Croatia delivered the Croatian language version (now considered an official EU version) to Bosnia and Herzegovina.” [47: 29 and 33].

<sup>33</sup> “[W]elcome progress achieved now calls for the Union’s concrete and fast action. The EU has the opportunity, and a strong self-interest, to lock in long-term positive momentum across the region. The Union must live up to its commitments and give credit where credit is due. Failure to reward objective progress by moving to the next stage of the European path would damage the EU’s credibility throughout the region and beyond. A tepid response to historic achievements and substantial reforms would undermine stability, seriously discourage much needed further reforms and affect work on sensitive bilateral issues like the Belgrade-Pristina dialogue. Strategically, it would only help the EU’s geopolitical competitors to root themselves on Europe’s doorstep.” [29: 3].

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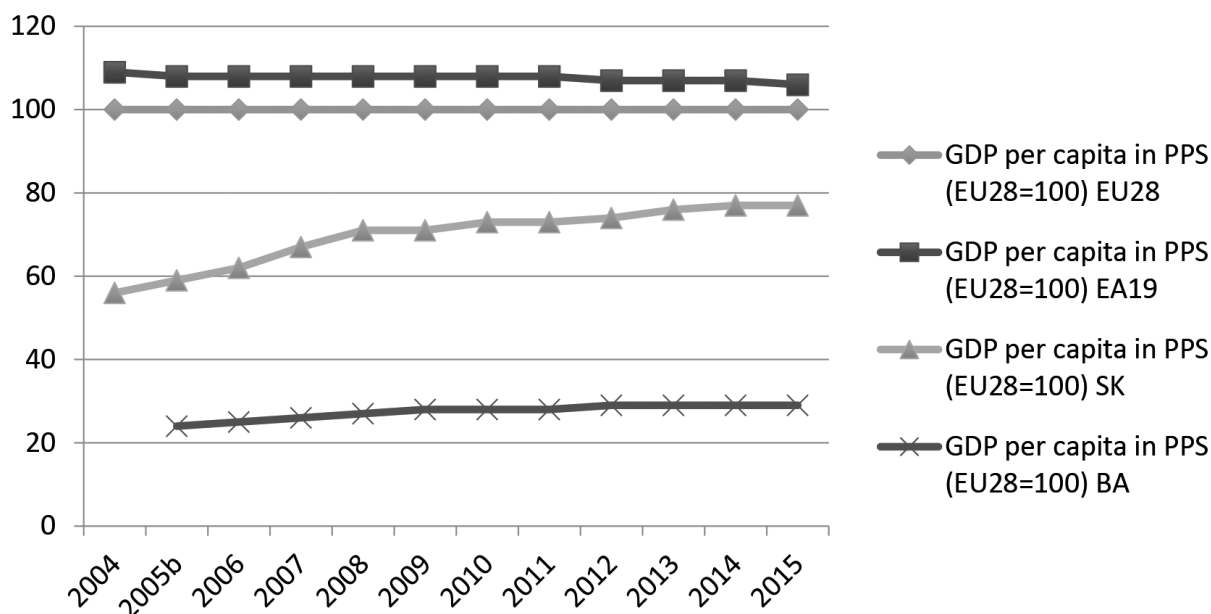
## ANNEX

**Table 1:** Slovakia & Bosnia and Herzegovina in a comparative perspective: basic facts  
(based on [86: 796-7 and 833] - [87: 756 and 832-3])

	Slovakia	Bosnia and Herzegovina
Total area	49,035 km <sup>2</sup>	51,197 km <sup>2</sup>
Land area	48,105 km <sup>2</sup>	51,187 km <sup>2</sup>
Location	Central Europe	SE Europe
Population	5,492,677	3,871,643
Ethnic groups	Slovak 81%; Hungarian 9%; Roma 2%; Ruthenian/Ukrainian	Bosniak 48%; Serb 37%; Croat 14%
Chief religions	Roman Catholic 62%; Protestant 8%; Greek Catholic 4%; none 13%	Muslim 40%; Orthodox 31%; Roman Catholic 15%
Principal languages	Slovak (official), Hungarian, Roma, Ukrainian	Bosnian, Croatian (both official); Serbian
Establishment	1993	1992
Member of major international organisations	UN, EU (2004; <i>Schengen</i> 2007; <i>Euro area</i> 2009), NATO (2004), OECD (2019 OECD Ministerial Council Meeting under the Presidency of the Slovak Republic), OSCE (Slovak 2019 OSCE Chairmanship), WTO	UN, OSCE

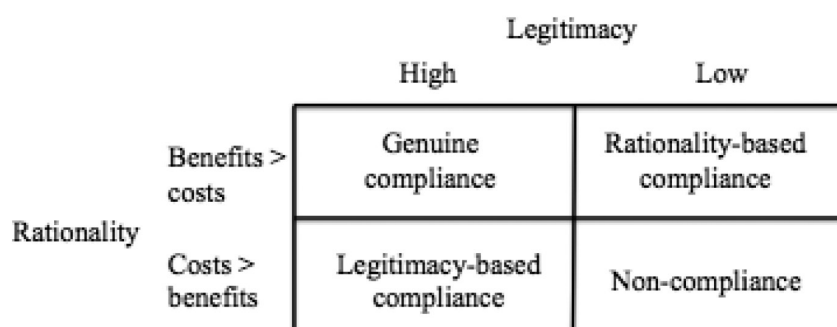
**Table 2:** Comparative perception of the passive leverage and active leverage concept  
(based on the passive leverage and active leverage concept by VACHUDOVA  
[62: 65 and 108-109])

Passive leverage	versus	Active leverage
<b><i>Benefits are shaped by:</i></b>	<b><i>Characteristics of the pre-accession process:</i></b>	<b><i>Requirements of EU membership:</i></b>
Costs of exclusion when neighbouring states are joining;		
EU treatment of non-members		
<b><i>Political benefits:</i></b>	Asymmetric interdependence	Copenhagen political criteria
Protection of EU rules;		
Voice in EU decision-making		
<b><i>Economic benefits:</i></b>	Enforcement	Copenhagen economic criteria
Access to EU market;		
Transfers from EU budget;		
Increased investment + growth;		
Increased entrepreneurship + skills		
<b><i>Additional benefit:</i></b>	Meritocracy	<i>Acquis communautaire</i>
EU membership conditionality as a catalyst for domestic reform		

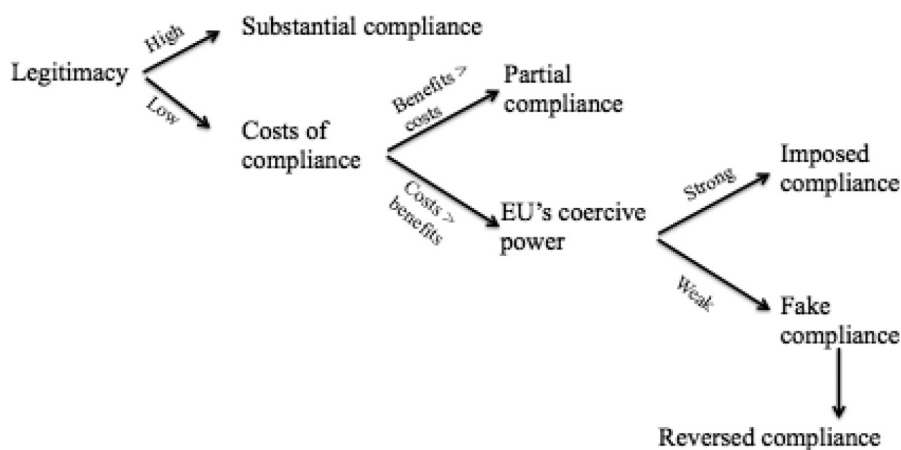


Legend: EU – European Union; EA – Euro area; SK – Slovakia; BA – Bosnia and Herzegovina; b – break in time series.

**Figure 1:** Slovakia & Bosnia and Herzegovina in a comparative perspective: GDP (per capita in PPS; EUROSTAT [59])



**Figure 2:** Explaining the compliance behaviour of EU accession states (NOUTCHEVA [70: 29])



**Figure 3:** Legitimacy, costs of compliance, EU power and compliance outcomes (NOUTCHEVA [70: 32])



**Figure 4:** Sovereignty in the Balkans (NOUTCHEVA [70: 9])

**Table 3:** Timeline: ex-Yugoslavia and ex-Czechoslovakia in a comparative perspective (1990 – 2019; [7], [28] - [29], [33: 24] - [34: 295], [77], [81], [88] - [90], [91: 97], [92: 675-676], [93: 901], [94])

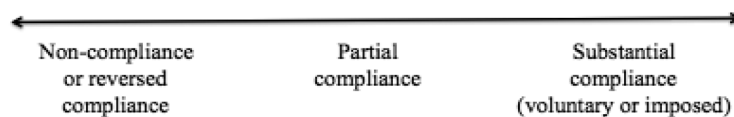
Year	Ex-Yugoslavia	Ex-Czechoslovakia
1990	<b>XK</b> as Republic of Kosovo	<b>CS</b> Agreement between the EEC and the EURATOM and the Czech and Slovak Federal Republic on Trade and Commercial and Economic Cooperation
1991	<b>HR, SI &amp; MK</b> declared independence	<b>CS</b> Visegrad Group (V3), Europe Agreement signed between the Community and the Czech and Slovak Federal Republic (16 December 1991)
1992	<b>BA</b> independence; <b>RS &amp; ME</b> as new Federal Republic of Yugoslavia (State Union of Serbia and Montenegro)	CEFTA
1993	Copenhagen European Council: Copenhagen criteria; <b>SI</b> Cooperation Agreement signed between the EEC and Slovenia	<b>CZ &amp; SK</b> independent countries; Visegrad Group (V4); Copenhagen European Council: Copenhagen criteria; <b>CZ &amp; SK</b> Europe Agreement
1994	Essen European Council	Essen European Council
1995	<b>BA</b> Dayton/Paris Peace Agreement	<b>SK</b> applied for EU
1996	<b>SI</b> applied for EU	<b>CZ</b> applied for EU
1997	Luxembourg European Council: <b>SI</b> bilateral intergovernmental conference to be convened in 1998	Luxembourg European Council: <b>CZ</b> bilateral intergovernmental conference to be convened in 1998; <b>SK</b> preparation of negotiations to be speeded up in particular through analytical examination of EU <i>acquis</i>
1998	<b>SI</b> accession negotiations launched	<b>CZ</b> accession negotiations launched
1999	<b>SI</b> Europe (association) Agreement; <b>XK</b> UNSCR 1244/1999	Helsinki European Council
2000	Feira European Council: all SAP countries “potential candidates” for EU membership; Zagreb Summit: SAP launched	<b>SK</b> accession negotiations launched
2001	<b>HR &amp; MK</b> signed SAA	
2002	Copenhagen European Council: <b>SI</b> completion of accession negotiations for 2004 EU enlargement	Copenhagen European Council: <b>CZ &amp; SK</b> completion of accession negotiations for 2004 EU enlargement



<b>2003</b>	Thessaloniki European Council: EU perspective for the Western Balkans reiterated (Thessaloniki Agenda); <b>HR</b> applied for EU	
<b>2004</b>	<b>SI</b> joined the EU; <b>HR</b> candidate country status; <b>MK</b> SAA enters into force, applied for EU	<b>CZ &amp; SK</b> joined the EU
<b>2005</b>	<b>HR</b> SAA enters into force, accession negotiations launched; <b>MK</b> candidate country status	
<b>2006</b>	Renewed consensus on enlargement; CEFTA 2006; <b>ME</b> declared independence; <b>MK</b> European Partnership	
<b>2007</b>	<b>SI</b> joined the Euro & Schengen area; <b>ME</b> European Partnership, signed SAA	<b>CZ &amp; SK</b> joined the Schengen area
<b>2008</b>	<b>XK</b> unilaterally declared independence, EULEX; <b>RS &amp; BA</b> European Partnership, signed SAA; <b>MK</b> Accession Partnership; <b>ME</b> applied for EU	
<b>2009</b>	<b>RS</b> applied for EU	<b>SK</b> joined the Euro area; <b>CZ</b> Presidency of the Council of the European Union
<b>2010</b>	<b>ME</b> SAA enters into force, candidate country status; <b>XK</b> ICJ Opinion on the Kosovo declaration of independence and UN General Assembly resolution	
<b>2011</b>	<b>HR</b> completion of accession negotiations for 2013 EU enlargement; <b>RS – XK</b> EU-facilitated dialogue launched	
<b>2012</b>	<b>ME</b> accession negotiations launched; <b>RS</b> candidate country status; <b>MK</b> High Level Accession Dialogue; <b>BA</b> High Level Dialogue on the Accession Process; <b>XK</b> declared end of supervised independence, SAA feasibility study	
<b>2013</b>	<b>HR</b> joined the EU; <b>RS – XK</b> First agreement of principles governing normalisation of relations; <b>RS</b> SAA enters into force	
<b>2014</b>	“Berlin process”: “Western Balkans Six” initiative; <b>RS</b> accession negotiations launched; <b>XK</b> SAA initialled	
<b>2015</b>	Medium-term strategy for EU enlargement policy; <b>BA</b> SAA enters into force; <b>XK</b> signed SAA	
<b>2016</b>	<b>BA</b> applied for EU; <b>XK</b> SAA enters into force	<b>SK</b> Presidency of the Council of the European Union
<b>2017</b>	Following the 2016 Communication on EU Enlargement Policy next Communication in 2018	White Paper on the Future of Europe: Reflections and scenarios for the EU27 by 2025

2018	Western Balkans Strategy; EU-Western Balkans summit (Sofia Declaration and Sofia Priority Agenda); <b>MK</b> European Commission repeats its unconditional recommendation to open accession negotiations (following its 2009 – 2014 annual recommendations)	
2019	<b>MK</b> the Prespa Agreement enters into force	

Legend: BA – Bosnia and Herzegovina; CS – federation of CZ & SK; CZ – Czech Republic/Czechia as of 18 September 2018; HR – Croatia; ME – Montenegro; MK – the former Yugoslav Republic of Macedonia (FYROM)/Republic of North Macedonia as of 15 February 2019; RS – Serbia; SAA – Stabilisation and Association Agreement; SAP – Stabilisation and Association Process; SI – Slovenia; SK – Slovakia; XK – Kosovo (UNSCR 1244/1999).



**Figure 5:** The compliance behaviour of Balkan accession states (NOUTCHEVA [70: 4])

		Legitimacy	
		High	Low
Rationality	Benefits > costs	Bulgaria	Bosnia and Herzegovina
	Costs > benefits		Serbia-Montenegro (2002-2006) Kosovo (1999-2008)

**Figure 6:** Explaining the compliance behaviour in the Balkans (NOUTCHEVA [70: 200])

**Table 4:** Account of the case of Bosnia and Herzegovina by the COUNCIL OF THE EU (2014), the EUROPEAN EXTERNAL ACTION SERVICE (2014) and the EUROPEAN COMMISSION (2015)

<p><b><i>“The Council expresses serious concern that the country [Bosnia and Herzegovina] remains at a standstill in its EU integration process ... The Council calls on Bosnia and Herzegovina to act swiftly and with determination on the Council conclusions of 15 December 2014.”</i></b> [95: 10])</p>
<p><b><i>“[T]he Council today has decided that we will be ready to re-sequence the order in which the conditionality will be faced. We have agreed with the ministers, after having agreed with the Bosnian leadership, that in Sarajevo there will be a work starting tomorrow to draft and agree on a written declaration, a written commitment, from the side of the presidency, of the leadership of different parties and a vote of the Parliament in Bosnia and Herzegovina to clearly state the commitment and the engagement of the leadership and of the population that is more than ready to move towards a European Union, to reforms, starting from economic and social reforms, but then also tackling the functionality of the State and all the different levels of the authorities. ... [T]his could be a turning point in the way of Bosnia and Herzegovina towards the European Union.”</i></b> [72]</p>
<p><b><i>“The new tripartite Presidency of Bosnia and Herzegovina initiated a written commitment to undertake reforms and advance the European integration process. The written commitment, whose language fully reflected the conclusions of the EU Foreign Affairs Council of December 2014, was signed by the leaders of all the 14 political parties represented in the Parliamentary Assembly, and endorsed by Bosnia and Herzegovina’s Parliament in February [2015].”</i></b> [24: 7]</p>

**Table 5:** Bosnia and Herzegovina, and Kosovo (UNSCR 1244/1999)  
in the light of EU *acquis communautaire* (based on [24] - [25])

Copenhagen criteria for EU membership	BA 2015 Report		XK 2015 Report	
	State of play	Progress	State of play	Progress
<b>Political criteria</b>				
Democracy	civil society	–	civil society	+/-
Public administration reform	– –	–	–	+
Rule of law	–	+/-	– –	+/-
Human rights and the protection of minorities	freedom of expression	– –	freedom of expression	–
Regional issues and international obligations	WB6	TEN-T	WB6	TEN-T
<b>Economic criteria</b>				
The existence of a functioning market economy	– –	+/-	– –	+/-
The capacity to cope with competitive pressure and market forces within the Union	– –	+/-	– –	–
<b>European standards (Acquis communautaire)</b>				
<i>Internal market</i>				
Free movement of goods	– –	+/-	– –	+/-
Movement of persons, services and right of establishment	– –	+/-	– –	+/-
Free movement of capital	+/-	–	–	+/-
Customs and taxation	+/-	+/-	customs +/-	+/-
			taxation – –	+/-
Competition	–	–	– –	–
Public procurement	–	+	– –	+/-
Intellectual property law	+/-	+/-	–	+/-
Employment and social policies, public health policy	– –	–	– –	–
Education and research	– –	–	– –	–
WTO <sup>34</sup> issues	– –	–	– –	–
<i>Sectoral policies</i>				
Industry and SMEs	– –	–	–	+/-
Agriculture and fisheries	– –	+/-	–	+/-
Environment and climate change	– –	+/-	– –	–
Transport policy	– –	+/-	– –	+/-
Energy	– –	+/-	– –	+/-
Information society and media	– –	– –	–	+/-
Financial control	– –	+/-	– –	+/-
Statistics	– –	+/-	(–) –	+
<i>Justice, freedom and security</i>	–	+/-	– –	+/-

Legend: BA – Bosnia and Herzegovina; TEN-T – Trans-European Transport Network; WB6 – Western Balkans Six; XK – Kosovo (UNSCR 1244/1999); **assessment scale for the state of play:** *early stage* (– –); *some level of preparation* (–); *moderately prepared* (+/-); *good level of preparation* (+); *well advanced* (+ +); **assessment scale for progress:** *backsliding* (– –); *no progress* (–); *some progress* (+/-); *good progress* (+); *very good progress* (+ +).

<sup>34</sup> World Trade Organisation (alias WTO): Bosnia and Herzegovina not a member of WTO, but with observer status (has held negotiations for accession to the WTO); Kosovo (UNSCR 1244/1999) not a member of WTO (has taken no formal steps to join).

# “NEW TOKYO. NEW TOMORROW. (NEW G20).” – HARD POWER, SOFT POWER, SMART POWER?\*

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**Abstract:** *With reference to the statement of the former US Secretary of State James Baker talking about the new post-Cold-War community of democracies that would “stretch from Vancouver to Vladivostok” Mahbubani [1: 42-43] points out the position of Japan as the first and until then the exclusive Asian member of the “Western club” represented by the Organisation for Economic Cooperation and Development (OECD) and the G7. Throughout most of recorded history Asia (embodying the biggest share of the world’s population) has enjoyed the biggest share of the world’s economy, with three of the four largest economies in the world by 2050 (in the respective order: China; USA; India; Japan) envisaged by a Goldman Sachs BRICs study to be Asian, he continues, when claiming that: “Japan surged ahead of the rest of Asia because it understood the message of Western success [brought about by the Industrial Revolution] almost a hundred and fifty years earlier”; the Japanese (Meiji reformers) “were willing to consider Western best practices from any country and were prepared to mix and match policies in an eclectic fashion”; and adding that “the Chinese had learned from Singapore, and Singapore from Japan” [1: 51-52, 77-78].*

*The so-called “new Asian Great Game” (Mahbubani, 2011 cited in [2: 291]) refers to the “geoeconomics (“traditionally” alias **soft power**) versus geopolitics (“traditionally” alias **hard power**)” challenge: “The most severe challenge facing rising powers in Asia in particular is the growing severity of natural resource constraints, especially land and water, which are not easily amenable to technological solutions and which (unlike energy) cannot be augmented by trade” [2: 309]. As formulated by Staněk [3] the current Fourth Industrial Revolution mirrors the society, revealing the (il)logic of today’s architecture of the society; the question, therefore, is if we are willing to accept this fact and if we are aware of the necessity of changes, and as individual civilisation models react differently to the same conditions (namely, differences in languages, history and society affect the implementation as well as impact of technological changes), it is essential to comprehend the mutual impact of the speed of technological changes and the speed of adaptation both of society and individuals. Thus, a “**smart power**” dimension arises – in the case of Japan represented by its Society 5.0 concept [4: 119-122].*

*The more inclusive format of G20 (designated since the latest global financial crisis as “the world’s “premier forum” for economic cooperation”) “is playing a mid-field game: facilitating discussion while standing by for (rare) emergencies. This operational model more closely mirrors Asian than Western approaches to governance, and may be a harbinger of change in the global system” as Dobson & Petri [5: 261, 273-274] perceive it. Hence, along with illustration in a comparative case study (Japan and the Slovak Republic) addressing the United Nations SDG 11 (Sustainable cities and communities), we focus on the 28-29 June 2019 G20 Osaka Summit in terms of the prospect of a know-how transfer in the OECD context.*

**Keywords:** Japan, Slovak Republic, UN SDGs, G20, OECD, hard power, soft power, smart power, Society 5.0, education

\* This paper results from scientific research conducted at the University of Economics in Bratislava in the framework of the VEGA research project No. 1/0654/16 (2016-2018, Institute of Economics and Management, University of Economics in Bratislava) and the VEGA research project No. 1/0812/19 (2019-2022, Institute of Economics and Management, University of Economics in Bratislava).

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## 1. INTRODUCTION

*“In the nineteenth century it was taken for granted – especially in Europe – that the objective of a nation-state was to enhance its power, colonize other nations, and develop large spheres of influence. In the twentieth century – as evidenced by the behaviour of Germany and Japan after World War II – national power was enhanced by increasing the size of the economy. Competition in the nineteenth century for political influence and territorial control was a zero-sum game. Competition in the second half of the twentieth century could become a positive sum game. Growing economies could benefit, not harm, each other. They could grow together.”*Mahbubani [1: 80].

Reischauer & Craig [6] claimed that within the region of the so-called *Far East* or *East Asia* Japan has sustained its uniqueness throughout most of its history owing to its archipelago and relative remoteness. In terms of chronology from *kodai* (the Ancient Age) through *chūsei* (the Middle Ages) to *kinsei* (the pre-modern period) and *kindai* (the Modern Age) the latter two overlapping eras are distinguished by the Industrial Revolution and participation of Japan in the world economy in the 19<sup>th</sup> century.

Bouvier points out in his *Chronique japonaise* [7: 106] that the country “*imposed a quarantine upon itself*” (similarly to an autarchy represented by the Chinese empire in the 18<sup>th</sup> century) and sheds light onto the so-called *Pax Tokugawa*. *Sakoku* (alias “*closed country*”) having been characterised by a policy of strict regulations and limitations of outward interactions under the *Tokugawa Shogunate Era* (1600-1868), “[i]n the 1860s, a group of Meiji reformers – who were determined to save Japan from the fate of Western colonization or domination that had engulfed most of Asia – sailed to all the leading Western societies to discover the best practices of the West. [...] [The Japanese] were willing to consider Western best practices from any country and were prepared to mix and match policies in an eclectic fashion.”, as Mahbubani [1: 52] puts it.

Bearing in mind a sample of studies/reports carried out ([4], [8] – [11]) and the recently released awaited updated analysis ([12]) of an unpublished manuscript ([3]), this paper aims to address the prospect of Japanese know-how transfer vis-à-vis its *Society 5.0* concept in the OECD context within the interactive process between the G20 and the OECD in a “zoom-in”/“zoom-out” comparative perspective – with reference to recently released data – as well as challenges that lay ahead, taking into consideration the scope and limits of such analysis.<sup>3</sup>

## 2. SMART POWER

*“The decision to hold the 2020 Olympics and Paralympics in Tokyo has been made, and there is momentum that supports the Cool Japan strategy. [...] Through our discussions we realized that what is expected from Cool Japan is not simply some economic effects achieved by introducing and promoting Japanese culture. Japan is well versed in facing and tackling challenges, and has already been addressing a number of difficulties, including a declining birthrate and an aging population, environmental and energy issues, and financial reconstruction that many countries are likely to face in the near future. Japan is a nation of innovation that since long ago has flexibly imported the products of foreign cultures and developed them as its original culture, amid its harsh environment of limited land and a lack of resources. Japan should now take the initiative in solving difficult issues by using the originality and ingenuity characteristic of its people, and thus become a world leader. Japan’s brand value as a nation will be raised*

<sup>3</sup> Cf. methodological pluralism claimed by N. Hynek [13: 173].



*if other countries in the world can use Japan's case as a reference when challenged by similar problems. In other words, I hereby declare that, "Japan, a country providing creative solutions to the world's challenges," is the new mission of Cool Japan." Declaration of Cool Japan's Mission by the respective Minister in charge of the "Cool Japan" strategy [8].*

The title of our paper linked to the upcoming 2020 Tokyo Olympic Games (*"New Tokyo. New Tomorrow."*) also takes notice of the projection that three of the four largest economies in the world by 2050 (in the respective order: China; USA; India; Japan) are to be Asian.

Should we in this very context take into account that *"genuine digitisation, application of AI [Artificial Intelligence – authors' remark] and autonomous systems will probably eventually lead to significant reduction in the overall volume of individual and societal consumption [and eventually possibly a shrinking rather than a burgeoning economy]" [12: 70]*, let us dwell on nowadays a universal slogan *"Make XYZ great (again)."* by first contemplating what it takes to be "great (again)" – is it *"Hard power, soft power, smart power?"*. Then, Japan's vision of societal progress for the future will be in our focus; and, finally, we will seek illustration in a comparative case study (Japan and the Slovak Republic) addressing the *United Nations Sustainable Development Goal 11: Sustainable cities and communities*.

## 2.1. International Cooperation

*"Pour optimiser sa puissance, un État doit donc œuvrer à faire concorder les objectifs de son soft et de son hard power. La combinaison harmonieuse des deux est appelée « puissance intelligente » (smart power) par Nye, qui développe cette notion, forgée dès 2004 par Suzanne Nossel, dans son livre de 2011 intitulé Le Futur de la puissance. Il y insiste sur le fait que, dans le monde du XXI<sup>e</sup> siècle, seule une combinaison intelligente des ressources de l'influence et de la contrainte peut permettre à un pays de parvenir à ses fins. Au contraire, miser sur l'une ou l'autre seulement des deux faces de la puissance ne peut suffire à peser sur la scène internationale."* Louis [14: 161-162].

Since *power* as one of central concepts in the area of international relations may be referred to in terms of geography; demography; impact or development of economic nature; governance; diplomacy; national identity or military terms among others (Drulák in [15: 179-182]), S. Strange – whose contribution to the establishment and development of the *international political economy* (examining the political background of economic processes just like the economic background of political processes) was vital – identified *structural power* on the grounds of the *knowledge* structure, the *financial* structure, the *security* structure, and the *production* structure [16: 43]. F. Munier [17: 52-53] quotes J. Nye's perception of two "faces of power" (*alias* Ares & Aphrodite) as an analogy to *hard power* & *soft power* with classification in Table 1, which follows.

**Table 1:** Forms of power by Nye (abridged from [14: 162])

<i>Forms of power</i>	<i>Hard power</i>		<i>Soft power</i>
Components	economic power	military power	co-optive power and soft power distinguished in 1990
Means	investments/ subventions sanctions	threats coercion	popular culture/values country policy
<b>Combination</b>	<b><i>Smart power</i></b>		



In this respect, one needs to keep in mind that specification of *hard power* & *soft power* varies in literature; hence, should *smart power* represent an amalgamation of both *hard power* and *soft power* as shown in Table 1, it may be “eloquently” expressed by the term “*je ne sais quoi*”. When applied in the case of Japan with adherence to the classification offered by J. Nye (as abridged from [14: 162] in Table 1), the “*Cool Japan*” strategy might be associated with *soft power*, and “super-smart” is the characteristics of *Society 5.0* (alias *smart power*), to which we are going to draw attention now.

## 2.2. Society 5.0

*“The essence of Society 5.0 is that it will become possible to quickly elicit the most suitable solution that meets the needs of each individual.”* Japan’s Prime Minister Shinzo Abe at the International Conference of the Future of Asia in 2017 [18].

As a consequence of the famous Imperial Charter Oath: “*Knowledge shall be sought throughout the world.*” under the 1868 Meiji Restoration, “*an influx of goods, ideas, and people from Europe and the United States set in that contributed to a fundamental transformation of Japanese society*”; Conrad [19: 608-609] also emphasises that the Japanese modernization project is to be perceived in the context of a backdrop of interactions in East Asia, and continues: “*According to the ideology of the time, Japan’s colonial conquest was a means both to exhibit power status and to transmit what Japan had learned from the West to the less ,civilized’ neighbors in the region. Frequently, however, the colonies were more than areas of supposedly benevolent intervention, or objects of exploitative politics; rather, they were seen as large testing grounds for – sometimes competing – Japanese visions of modernity. The puppet state of Manchukuo, in particular, from the late 1920s served the function of a laboratory of social reform in which the colonial state experimented with labour politics, interventions in the economy, city planning and urbanism.*”.

The practice of “one emperor, one era name” launched with the *Meiji* (alias the “M”) *Era* (1868-1912) was followed by the *Taisho* (alias the “T”) *Era* (1912-1926); the *Showa* (alias the “S”) *Era* (1926-1989); the *Heisei* (alias the “H”) *Era* (1989-2019); up to the current *Reiwa* (alias the “R”) *Era* (following the ascent of Emperor Naruhito to the Chrysanthemum Throne in May 2019) [20]. With the chronology of *Society 1.0* (alias the Hunting society), *Society 2.0* (alias the Farming society), *Society 3.0* (alias the Industrial society), *Society 4.0* (alias the Information society), it is *Society 5.0* (alias the Super smart society) outlined in Japan’s 5<sup>th</sup> *Science and Technology Basic Plan* that is the country’s vision of societal progress for the future.

Defined by the Cabinet Office of the Government of Japan as a “*human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space*”, the vision of *Society 5.0* builds on data made accessible in the framework of *Society 4.0* that are to be ensued by interactive cooperation and legislative amendments; furthermore, research/development/innovation and education are crucial for adaptability of the society. Staněk & Mařík & Doliak & Ondrovič [12: 54-55] highlight the civilisational contrast when “*the Euro-American model targets production of robots aimed at increasing productivity, efficiency, profitability, market acquisition, etc.*”, arguing that, paradoxically, perception in economic as well as societal terms rests as a matter of fact on the rationale of the 19<sup>th</sup> century or the first half of the 20<sup>th</sup> century: market expansion; profitability at any cost; and productivity resulting from depletion of resources or draining of production factors.

Accordingly, they raise the point if it makes sense when taking into account that income polarisation, as a considerably limiting factor of consumption as we know it, has been on the rise.

The case of Japan is certainly one of particular interest – representing a symbiosis of an economy with global outreach, sophisticated (high-tech) development and protection of own cultural heritage; therefore, we now turn our attention to a comparative illustration addressing target 11.4 of the United Nations *SDG 11 (Sustainable cities and communities)* oriented on strengthening efforts to protect and safeguard the world’s cultural and natural heritage.

### 2.3. United Nations *SDG 11*: The Case of Japan and Slovakia

*“One of India’s most famous industrialists is Ratan Tata. [...] In late 2005 he told an interesting story. He said that for many years he would travel around India and try to persuade people to learn from Singapore’s experience. The inevitable response he got was this: “Singapore is so small. India is so big. What can big India learn from Singapore?” However, when China began to take off in the 1990s and Ratan Tata said that India could learn from China, his fellow Indians could not say that China was too small for India to learn from. The Indian economy began to open up in 1991, mostly because of the balance of payments crisis, but partially also because of the lessons from China as well as the fear of being left behind. Few Indians knew that the Chinese had learned from Singapore, and Singapore from Japan.” Mahbubani [1: 77-78].*

In three decades between the 1950s and early 1980s Japan experienced the so-called economic miracle with its share on world GDP multiplying from 3% to 13% [21: 122-123]. According to the 2019 edition of *The Economist Pocket World in Figures*, both Tokyo (as the biggest city in the world represented by urban agglomerations on the basis of 2017 population data) and Osaka (the 8<sup>th</sup> biggest city in the world represented by urban agglomerations on the basis of 2017 population data) rank in city liveability top 10 in terms of the *Economist Intelligence Unit Liveability Index* with global coverage based on a spectrum of factors such as stability, health care, culture, education and infrastructure [22: 19-20]. Indeed, achieving *Society 5.0* “would enable not just Japan but the world as well to realize economic development while solving key social problems. It would also contribute to meeting the Sustainable Development Goals (SDGs) established by the United Nations. Japan aims to become the first country in the world to achieve a human-centered society (Society 5.0) in which anyone can enjoy a high quality of life full of vigor. It intends to accomplish this by incorporating advanced technologies in diverse industries and social activities and fostering innovation to create new value.” [10].

Ranking of Japan in the *Sustainable Development Report Dashboard 2019* is 15<sup>th</sup> of 162 (SDG Global Index value of 78.9 in [23]) compared to the one of the Slovak Republic (ranking 27<sup>th</sup> of 162 and SDG Global Index value of 76.2 in [24]), with their shared (OECD) regional average score of 77.7. In terms of the *NIHON-GATARI-SHO – Guidelines for Narrating Japanese Culture* [9: 30-31] “Japan’s signature skill may be said to reside in analogy. [...] Moreover, while exhibiting the power of analogy and a talent for arrangement, Japan competes by combining strengths.”

Historically, assemblage of architecture and garden design (198 buildings and 12 gardens) in the surviving *Historic Monuments of Ancient Kyoto (Kyoto, Uji and Otsu Cities)* as the highest expression of such aspect of Japanese material culture in the pre-modern period received UNESCO World Heritage recognition in 1994. Until the middle of the 19<sup>th</sup> century Kyoto was the imperial capital of Japan and as a centre of the Japanese culture for over 1,000 years it illustrates

the general historical development of Japanese (wooden, particularly religious) architecture, and “the art of Japanese gardens, which has influenced landscape gardening the world over” [25].

In the Slovak case of UNESCO World Heritage 1993 inscription and 2009 extension, “[t]he castle of Spišský hrad, the town of Levoča, the associated sites in Spišské Podhradie, Spišská Kapitula, and Žehra constitute a remarkable group of military, urban, political, and religious elements, of a type that was relatively common in medieval Europe, but of which almost none have survived in such a complete condition with equivalent integrity. Levoča, Spišský hrad and the associated cultural monuments is one of the most extensive groups of military, urban, and religious buildings from the late Middle Ages and early Renaissance in Eastern Europe, the Romanesque and Gothic architecture of which has remained remarkably intact in Spišský hrad, Spišské Podhradie, Spišská Kapitula, and Žehra, together with the urban plan of Levoča. It is a group belonging to the same Saxon colonial settlement in the Middle Ages, of which it illustrates the material and cultural successes.” [26].

A comparison of commentaries on integrity as well as management and protection status in both cases is, therefore, facilitated in Table 2 below:

**Table 2:** Integrity, management and protection status  
(abridged from UNESCO World Heritage)

<b>UNESCO World Heritage sites</b>	<b>Integrity</b>	<b>Management and protection</b>
<i>Historic Monuments of Ancient Kyoto (Kyoto, Uji and Otsu Cities)</i>	The buildings and gardens composing the property retain high levels of authenticity in terms of form/design, materials/substance, traditions/techniques, and location/setting.	The Agency for Cultural Affairs, Kyoto and Shiga Prefectures, and Kyoto, Uji and Otsu Cities provide the owners of the component parts with both financial assistance and technical guidance for their protection and management.
<i>Levoča, Spišský hrad and the associated cultural monuments</i>	The degree of authenticity of the property is satisfactory. Special attention should, however, be given to the quality of the maintenance and restoration work on the private buildings of Levoča.	The protection of the property and the management plan and its practical organization are adequate. However, they need to be strengthened and improved in certain respects and the management plan needs to be published.
<b>UN SDGs relevance: SDG 11</b>	<b>11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage</b>	

A lesson that could be learned from the UNESCO World Heritage site *Historic Monuments of Ancient Kyoto (Kyoto, Uji and Otsu Cities)*, which is “one of the most typical World Heritage sites situated in urban context”, was formulated as follows: “Although its component parts are limited to temples, shrines and a castle, it is quite crucial to protect its surrounding context as well as the property itself in an integrated manner, in order to transmit its Outstanding Universal Value to the future generations.” This is why the local authority (Kyoto city) introduced a new landscape policy in 2007 along with its engagement in activities to preserve the sites and monuments of the inscribed properties. “In the face of a society declining in population, and based upon understanding that the city has entered an age of city competition where each city appeals to its uniqueness to vie for allure as a city, the new policy is aimed to conserve and improve its landscape in order to generate a new added value of enhancement to its city character and allure. It would result in increased residence and population for interaction, concentration of excellent human resources, investment growth in local industry, tourist industry, knowledge

*based industry, etc.”, the proposal for best practice in terms of a new landscape policy in a broader and long-term perspective further reads and concludes: “Historic Monuments of Ancient Kyoto should be one of the best practices, because it would be an advanced case in the context of historic urban conservation against broad issues in the modern city, which could cause irreversible damage of the Outstanding Universal Value of the World Heritage property.” [27].*

### 3. CONCLUSION

*“Modern Japan has been profoundly shaped by its transnational contexts, while at the same time herself shaping these contexts.” Conrad [19: 608].*

Let us briefly recall Mahbubani [1: 74] stating that Japan was the first Asian country to modernise – namely, having watched Europe to colonise most of the world, it was quick to realise that it had to change and adapt.

In our title “*New Tokyo. New Tomorrow. (New G20).*” – *Hard power, soft power, smart power?* of this paper we outlined a trajectory from the short-term (*new imperial era “Reiwa”* since 2019) through the medium-term (*Society 5.0*) to the long-term perspective (shift from *hard power* via *soft power* to *smart power*).

We have already indicated to the reader that the title of our paper is linked to the 2020 Tokyo Olympic Games (“*New Tokyo. New Tomorrow.*”), but we have not commented our extension: “(*New G20.*)” It is now that we come to the point when we wish to elucidate that under the 2019 Japanese G20 Presidency the *Society 5.0* strategy was brought to the attention of the G20 at the G20 Osaka Summit held on 28-29 June 2019 as follows: “*Innovation is an important driver for economic growth, which can also contribute to advancing towards the SDGs and enhancing inclusiveness. We will work toward achieving an inclusive, sustainable, safe, trustworthy and innovative society through digitalization and promoting the application of emerging technologies. We share the notion of a human-centered future society, which is being promoted by Japan as Society 5.0. As digitalization is transforming every aspect of our economies and societies, we recognize the critical role played by effective use of data, as an enabler of economic growth, development and social well-being. We aim to promote international policy discussions to harness the full potential of data. [...] The responsible development and use of Artificial Intelligence (AI) can be a driving force to help advance the SDGs and to realize a sustainable and inclusive society. To foster public trust and confidence in AI technologies and fully realize their potential, we commit to a human-centered approach to AI, and welcome the non-binding G20 AI Principles, drawn from the Organization for Economic Cooperation and Development (OECD) Recommendation on AI.*” [28].

As signposted in the respective *G20 Osaka Leaders’ Declaration* from the G20 Osaka summit, reference was made to the *OECD Recommendation on Artificial Intelligence* anchored in the *OECD 2019 Ministerial Council Statement “Harnessing Digital Transition for Sustainable Development: Opportunities and Challenges”* [29], which was adopted in May 2019. Henceforth, the OECD will seek integrated and evidence-based policy analysis, technical solutions and expertise on digital transition.

This brings to our mind that Staněk & Ivanová [11: 167] have reminded us that the one feature adapting to a negligible extent has been the mankind, which Staněk [3] reiterated by stating that “*[i]t is impossible to change only technological design of society and not the civilisation itself*”. In this regard in terms of



the prospect of a know-how transfer in the OECD context in the interactive process between the OECD and the G20 we wish to highlight the Japanese concept focused on human skills with emphasis on communication, leadership and endurance, curiosity, comprehension and reading skills. In the words of the Japanese Minister of Education, Culture, Sports, Science and Technology Yoshimasa Hayashi: “We have to give students the skills to both survive that changing society and for them to lead that change.” [18]. So with implication to “a world where technology is integrated into nearly every part of society”, the prospect of a know-how transfer in the OECD context within the interactive process between the OECD and the G20 might encompass *inter alia* shifts that would be relevant to traditional education systems worldwide, such as more flexibility in addressing gaps in understanding and “removing the barriers between subjects and disciplines”, *alias* interdisciplinarity, “for the next generation to be prepared for the super-smart future” [18].

In summary, in our reflection presented in this paper we considered evolution of *smart power* in the Japanese context by exploring the background of *smart power*; the “Cool Japan” strategy and the *Society 5.0* vision with the **explicit prospect of a know-how transfer in the OECD context** within the interactive process between the OECD and the G20. **Implicitly**, however, the **prospect of a broader know-how transfer** stretching beyond the OECD context in terms of the 2025 *World Expo* (Osaka-Kansai Japan Expo under the theme “*Designing Future Society for Our Lives*” [30]) and providing an opportunity to further shape *smart power* in the Japanese context may be illustrated by simply adhering to the respective stakeholder focus and theme both in the legacy of the UNESCO World Heritage site *Historic Monuments of Ancient Kyoto* (“*New landscape policy, long-term view*”) with implications for UN SDG 11, and in the case of the 2020 *Tokyo Olympics and Paralympics* (“*New Tokyo. New Tomorrow.*”).

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# IMAGE-CREATING FUNCTION AND CREATION OF RELIABLE AND ACCURATE INFORMATION IN THE ACCOUNTING SYSTEM

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**Abstract:** *The purpose of this article was to present the impact of the accounting's image-creating function on the quality of information generated by the accounting system. Accounting has increased the range of functions over the years. Nowadays, in literature, there are many functions realized by accounting, including, among others, the image-creating function. For the wide range of recipients of information coming from the accounting system, its quality (understood through the prism of usefulness and usability) is very important. The desire to realize the image-accounting function may lead to the distortion of financial information. Therefore, it is especially necessary to supervise the observance of the principles of a faithful and reliable image.*

**Keywords:** *image-creating function of accounting, information function of accounting, quality of information in the financial statements*

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## 1. INTRODUCTION

The evolution of the accounting system has led to an increase in the catalogue of functions performed by this system. The currently distinguished functions realized by the accounting system include, among others, the image-creating function, the aim of which is (inter alia, to create the image of an individual among various groups of stakeholders, while maintaining the principle of a faithful and reliable image). At present, due to the wide catalogue of recipients of information from the accounting system, the quality of presented information, which determines the perception of an individual among various groups of stakeholders, has become an important aspect.

This article aims to present the accounting's image-creating function, which has been specified in the accounting system as a derivative of the information function and translate it into the quality of information presented in the financial statements. The content of the elaboration has been divided into three parts preceded by an introduction and summarized by the ending. The first part is aimed at introducing the accounting's image-creating function. Subsequently, there are consideration about the quality of information from the financial statements prepared in accordance with national or international regulations. The third part presents the relation between the image-creating function of accounting and the information quality of financial statements. The study is based on the method of critical analysis of the literature in the field of accounting theory.

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## 2. THE IMAGE-CREATING FUNCTION OF ACCOUNTING AS A DERIVATIVE OF THE INFORMATION FUNCTION

Contemporary accounting forms one of the basic information system of an enterprise. A wide set of users characterized by diverse expectations regarding the demand for data used in the decision-making process causes that the essence of accounting can be understood in a various way.

As it was noted by A. Szychta [1996, pp. 20-22], apart from the basic distinction between the discipline of science and practical activity, views on the empirical nature of accounting are also characterized by a large variation of its leading accents, which (in turn) results in the determination of accounting as:

- Information system,
- System for records of economic events,
- Language of business,
- Measurement system,
- Type of service activity,
- Reflection of real states and processes,
- Ideology.

Among the above-mentioned views, special attention should be paid to the position according to which the accounting system is an information system. Therefore, it performs actions, which are typical for systems – such as “input” (data), “processing” and “output” (information) [Nowak 1994, pp. 79-80]. As you can see, in this approach, information is an element that focuses attention. This causes that theorists define accounting as an information system, which identifies, records and informs stakeholders of an entity about economic events taking place in the unit [Smejda 2011, p. 105]. This definition may be extended, because, according to W. Brzezina [1998, p. 21], accounting is a complex information system (in this case – referred to as information-control system of a retrospective and prospective nature), adapted to the financial management of an enterprise.

Such a strong emphasis in literature on the identification of accounting with the information system results in a common view of the supremacy of the information function over other functions performed by accounting [Cieciura, 2016, p. 68].

According to the proposed definitions, this function can be understood as the creation of specific sets of information, their processing, and transfer to the management of the unit for the purpose of their adequate use in the management process [Messner 2003, pp. 27-28].

It was similarly described by K. Szymczyk-Madej [2007, p. 156]. She indicated that the information function is based on the creation of specific sets of information for the needs of business management, which are useful for external recipients.

It is worth nothing that according to H. Poetschke [2011, p. 16], the information system can be divided into:

- External information function,
- Internal information function.

Currently, it is assumed that financial accounting constituting one of the accounting subsystems is responsible for providing information to external users. The purpose of the developed information is to present the assets and capital of the company and registration of factors shaping the entity's financial result. This information has retrospective nature and constitutes the main source of shaping the external image of the individual. Provision of information for external stakeholders takes places (mainly) through financial statements [Kurek and Zielińska 2000, pp. 145-146].

On the other hand, the internal information function is realized both by the financial accounting subsystem and the subsystem of management accounting. Information generated by financial accounting is not sufficient for the needs of making optimal economic decision by the management of an individual. Therefore, as it is emphasized by H. Kurek and H. Zielińska [2000, p. 147], the resulting gap is filled with management accounting, which is aimed at supporting the decision-making process. The information generated in the management accounting subsystem is informal nature and it is largely shaped by individual needs of the individual's management. The information is based on data expressed both in the money measure and natural units.

The above analyzes of the information function focus on the process of satisfying the needs of users in terms of specific data used in solving the decision-making process. However, the transmitted information also creates a specific picture of the individual. This process can be identified as the implementation of the image-creating function of accounting.

In accordance with the proposed definition [Jastrzębowski 2015, p. 171], the implementation of the image-creating function is connected with "undertaking activities involving the proper modification of the enterprise's accounting policy" (including, in particular, selection of methods for evaluation of assets and sources of financing for the unit, as well as recognition of its revenues and costs) in order to create an image of the unit consistent with the particular interests of the entity's management bodies, in front of external units in relation to the enterprise".

Activities taken as a part of the implementation of the image-creating function of accounting have a pro-active character, dependent on the will of people responsible for creating the system. This problem leads to the question of the quality of data obtained by users from the data accounting system, in the situation when the information function of accounting was applicable.

### **3. QUALITY OF INFORMATION FROM THE ACCOUNTING SYSTEM ACCORDING TO NATIONAL AND INTERNATIONAL REGULATIONS**

According to the Accounting Act [Journal of Laws of 2018, item 395, as amended], entities are obliged to present their property and financial situation and financial result in a reliable and clear manner. Accounting principles such as the principle of accrual, matching and prudence are subordinated to this goal. Its implementation is carried out by legal acts constituting accounting frameworks, accounting policy of the unit, as well as institutionalized supervision over financial reporting of entities. In 2018, the position of the Accounting Standards Committee regarding the principle of reliable and clear image in the realization of the Accounting Act's provisions (intended to be another tool for achieving this goal) was prepared.

This position does not define what is meant by a reliable and clear image. However, it indicates the purpose of the financial statements, i.e. provision of useful (helpful and reliable) numerical and verbal information on the activities and situation of the unit [Position ..., point 5] for re-

cipients. It determines legal acts regulating the minimum scope of information that should be presented by units to typical recipients. Moreover, it was found that due to the diverse subject of activity, size, legal form, etc. of units, it is not possible to cover all information needs with these acts. The solution of this inconvenience includes tools made available to unit managers enabling them to take into account these needs and circumstances, which are not specified in legal acts.

The fact that managers have the possibility of influencing the accounting policy and the shape of the financial report in order to implement the principle of a faithful and reliable image does not exclude the possibility of exerting influence also in other purposes, among others, in image-creating matters.

Credibility should be understood as reliability, truthfulness, certainty, responsibility, authenticity – credibility is a basic quality feature of useful information, determined by sources of information, and determining reliability and truthfulness of information [Zyznarska-Dworczak 2015, p. 192]. Reporting information is generated by the accounting system, and the fulfillment of certain quality features by this information enables to use it to reduce uncertainty in the decision-making process [Kaczmarczyk 2016, p. 126]. In relation to the above, it is so important that the reporting information is credible and reliable.

The concept of credibility is gradually taking over from the literature through a faithful image / reflection. This has its basis, among others, in amendments to the Conceptual Frameworks for IFRS and also in certain language inaccuracies arising in the process of translation of foreign legal acts and guidelines. The concept of faithful presentation is not the same as the concept of credibility. Changes towards faithful presentation are a consequence of the growing number of estimates introduced to the financial statements, making it impossible to ensure the full credibility. However, the aim of this article is to determine the impact of the image-creating function of accounting on the quality of information in general, and therefore – subtle features that differentiate both concepts will not affect further analysis.

Financial statements include financial and non-financial information. Lack of credibility and reliability in the first impulse are identified with the financial sphere. However, due to the growing interest in integrated reporting, as well as higher and higher requirements regarding the scope of non-financial information, the risk of the lack of credibility increases. This problem is highlighted by I. Matuszyk [2018, p. 108], who underlines the issues of potential selectivity of presented information, leading to the disclosure of information only beneficial from the marketing point of view, and concealing information unfavorable to the image of an individual.

A similar problem in the context of the credibility of the integrated statement is raised by K. Piotrowska [2016]. She narrows the considerations regarding the issue of sharing information about innovative activities with managers – in the context of the risk of weakening the competitive potential of the entity in the face of disclosure of such information.

Behaviors that reduce the credibility of information, such as selective presentation of data, may justify, among others, the occurrence of agency theory [cf. Rówińska 2016, pp. 520-521]. In view of the asymmetry in accessing information about the situation of the individual, where managers generating financial statements have a decisive advantage, the quality (i.e. credibility and reliability of the financial statements dedicated to the owners) may deteriorate as a result of adapting it to the realization of needs of managers in place of meeting the needs of the owners.

First of all, the financial statements should be useful, i.e. they should enable to make decisions based on them. Credibility and reliability of information, next to suitability, should be considered as the premises for usability. Reliable, but unhelpful information will not be useful, just like useful-, but unreliable information. Although in some circumstances, there may be a conflict between the usefulness and reliability of reporting information [cf. Wierzińska, 2012].

Therefore, for capital markets, it is very important to care for the credibility of data, because it is harder to assess the user's financial statements. The user is able to determine whether specific information is useful to him, because usefulness is a subjective feature – dependent, among others, on the needs and abilities of the user. On the other hand, verification of credibility requires information about the entity from other internal sources, which are not available to a typical user.

A tool to improve the reliability of reporting information is an audit of financial statements, obligatory for a selected group of entities. By analyzing the legal regulations of the audit [e.g. Act of statutory auditors, auditing companies and public supervision, Journal of Laws of 2017, item 1089, as amended], it can be noticed that there is an increased emphasis on the examination of reports of public interest entities. This group includes, among others, issuers of securities admitted to trading on regulated markets – i.e. entities, for whom image-creating issues related to the need to obtain capital are especially important.

#### **4. THE IMPACT OF THE IMAGE-CREATING FUNCTION ON THE QUALITY OF INFORMATION.**

Activities undertaken as a part of the implementation of the image-creating function of accounting have a pro-active nature, dependent on the will of people shaping the accounting system. Therefore, it is necessary to consider their impact on the achievement of credibility and reliability of information required by the theory of accounting.

As it was indicated in the previous point, legislative efforts in the field of balance sheet regulations strive to define a legal framework that enable to generate faithful and reliable information. Solutions can take one of two forms:

- Mandatory structures, realized in a clearly defined manner,
- Solutions with a selection field that enable to make autonomous decisions.

By referring to the pro-active nature of the activities of the image-creating function in the first variant, it is not possible to identify activities that enable to create (freely) the image. The use of mandatory structures causes an objective presentation of reality, independent of the will of creators of the accounting system in the unit.

Sources of the impact of the image-creating function of accounting can be traced for solutions that provide a check box for the user. The freedom in shaping activities can be considered in the context of assigning to one of the areas of the autogenous presentation of operations, i.e.:

- Creative accounting,
- Aggressive accounting,
- Fraudulent accounting.

P. Gut [2006, s. 10] defines the creative accounting as “keeping registration, records, processing and presentation of economic events with the use of applicable laws and properly interpreted



accounting rules in a manner that is not directly indicated in these provisions, and which is the result of ingenious, creative and non-standard application of these provisions and rules”.

On the other hand, the aggressive accounting, according to A. Wierciński [2008, pp. 147-148] should not be identified (directly) with taking illegal actions. The author expresses the view that the aggressive accounting includes fraudulent activities that do not violate the law.

In such a situation, actions unambiguously inconsistent with applicable legal provisions should be included in the area of fraudulent accounting.

Taking into account the above-mentioned division, it should be stated that the activities undertaken as a part of the implementation of the image-creating function and included in the area of creative accounting will support the obtaining of accurate and reliable information from the accounting system.

Furthermore, activities classified as the fraudulent accounting can be clearly identified as activities contributing to the generation of information that does not indicate fidelity and reliability.

However, such an unambiguous declaration cannot be expressed in the context of the image-creating actions included in the area of the aggressive accounting. The lack of unambiguous legal contraindications suggests that there may be situations that will ultimately generate information with adequate qualitative characteristics.

## 5. CONCLUSION

The aim of this article was to present the impact of the image-creating function of accounting on the quality of information generated by the accounting system.

Accounting has increased the range of functions over the years. Today, in literature, there are many functions realized by accounting, including, among others, the image-creating function, which aims to promote the individual with the use of data contained in the financial statements, while maintaining the superior accounting principle – the principle of accurate and reliable image.

For a wide range of recipients of information coming from the accounting system, its quality (understood through the prism of usefulness and usability) is very important. The desire to realize the image-accounting function may lead to the distortion of financial information. Therefore, it is especially necessary to supervise the observance of the principles of a faithful and reliable image.

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# WATER, FOOD AND SUSTAINABLE LIFESTYLE

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**Abstract:** *Central points of this paper are man and the environment. There are presented some aspects of the unsustainable practices related to agriculture and food production, and how last century's practices had negatively influenced our welfare due to a too chemical agriculture, soil erosion, water waste, diseases, and finally unhappiness. There are mentioned all three water components used to sustain present day economic-social system – green, blue, and grey water – and the ways to reduce humankind's impact upon environment together with rising its welfare, happiness and environmental sustainability. In the conclusion, there are mentioned the benefits connected to a more friendly way of interacting with nature while we are searching for a healthier food, water and air.*

**Keywords:** *Democracy, food, environment, happiness, soil erosion, water.*

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## 1. OVERVIEW

Life means movement and energy; and energy means there must be a source for it. Food and water are key-components of life and main energy providers for living organisms. But not all food and water production and consumption are sustainable. There are food production processes which are not sustainable from both production, and consumption point of view. Chemical fertilizers, pesticides, and other chemicals used in modern-type agriculture, to stimulate higher yield per surface of land, come with environmental costs, soil erosion and water pollution. More than needed food for individuals comes with higher economic costs and lower living standard due to medical problems.

The production of any commodity involves the consumption of water, and the product incorporates water, which we do not see; there are peculiarly virtual water and water footprint which are brought into attention here. Water footprint measures the quantity of water used to produce all goods and services used by one individual, or by the population of a specific country [1]. This water has three components: green, blue, and grey. *Green* water regards the rain water, while the *blue* water refers to surface water (from rivers, dams, impoundments, other types of catchments) and ground water (which is extracted, pumped, and transferred toward production places).

*Grey* water indicates the volume of water needed to absorb the load of pollutants and chemicals resulted due to agricultural and industrial production processes, while maintaining agreed ambient water quality standards [2].

While water footprint denotes the amount of this resource which is consumed, virtual water regards the needed water to produce something. As a result of agricultural activity, and of resulted

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food production processes in food industry, there is a highly connected chemical industry to natural environment and water resources.

The promoted reason for public acceptance of such a strategy is the higher yield per unit of land. But this comes with higher water consumption (due to irrigation) and a higher chemicalization of land (due to chemical fertilizers, herbicides, pesticides, and other chemicals used in agricultural processes). In the same time such a modern agriculture is connected to land concentration: it is not economic efficient to have modern agriculture of small land surfaces. Furthermore, to sustain it, there are needed huge water infrastructure projects, be they irrigation schemes, inter-basin transfers of water, and large dams. This can be spoken about as cowboy-economics, since economic powerful can invest in capital-intensive means while appropriating land and especially water, without any care about others' needs, and more important crossing limits of water systems, strongly hurting environment without bearing costs.

Even humankind witnessed a concrete revolution in the second part of past century [3], beginning with the 80' there appeared different reports and analyses pointing to negative impacts of such huge infrastructure projects [4]. All these large projects – land concentration and corresponding water projects – favor capital concentration, rising power of global players in food industry face-to-face with local communities: this capital concentration could favor stealthily changing of political system from one close to local communities into a system with oligarchic (or even totalitarian) characteristics. And this negatively impacts upon a sustainable life-style, because freedom plays important role in man's happiness. Related to this aspect, a well-documented study related to water control, food production and strong-hand politics is made by Wittfogel [5].

## 2. WATER AND LAND

As the vital resources which provide health and energy for living organisms, air, water and land must be regarded and protected with highest attention. Their quality provides health which is the most important thing for a person's happiness. There could be no sustainable lifestyle in the absence of good air, water and food quality. The sickness, and as a consequence the unhappiness of a society is directly influenced by access to these three vital resources, and by their quality.

Currently [6], the world faces important water shortages, as renewable freshwater resource/capita has fallen to 5920.508 cubic meters (c.m.) in 2014 from 13,401.912 (c.m.), as it was in 1962.

The global demand for water has been increasing at a rate of some 1% yearly, this trend being triggered by population growth, economic development coupled with changing consumption patterns; furthermore, already nearly half the global population live in areas that are potentially water-scarce at least *one month per year* [7], and this population could increase to some 4.8–5.7 billion by 2050.

Access to water will be a rising challenge in the years ahead, and the management of water resource will be one of the most difficult activities. Furthermore, main part of world soil resources, especially farmland, are in only fair, poor, and very poor condition, and this will only worsen in future, with negatively impacts on *water cycling* due to higher evaporation rates and a lower storage capacity for water in the soil. Changing precipitations pattern, and chemical components in soil due to modern agricultural practices, coupled with an increased soil runoff will overlap with higher *erosion*. All these are coming together with losing of some 65% of natural wetland worldwide because of human activity, especially in agriculture.

As production of high-yield crops need chemical fertilizers and herbicides, it harms the organic character of soil through erosion. Soil is the biggest water reservoir humankind has, and reducing organic matter in soil determines a reduced capacity to hold moisture. As a matter of fact, presence of 4% of organic matter in soils (deep to 30 centimeters) means that this creates the capacity to retain some 640000 liters of water/hectare [8]. In the same time chemical fertilizers, destroying living process in the soil, make it more vulnerable to droughts and this is coupled with the production of nitrogen oxygen, a greenhouse gas which is more potent than carbon dioxide.

Furthermore, we can always look to the situation concerning Lake Turkana's gradual retreat from Ethiopian territory, which brought intense intertribal clashes, [9] and we should see this as an example with potential recurrent and repetitive situations in other parts of the world.

Taking all these into consideration, from chemicalization of agriculture – and as an extension of rivers and ground water reservoirs – to rising demand for food and water, there should be identified some solutions to provide a sustainable future. Agriculture must face projected increases in food demand through improvement of soils' efficiency coupled to pollution's reduction; in all these actions *water is a key-factor* [10]. This strategy could give way to a sustainable ecological intensification of food production, through increasing ecosystems capacities to provide goods for humankind needs, without harming, destruction or disturbance of the environment.

Soils and vegetation management are central in this action. Ways of land use must follow the path of lower disturbance, maintaining soil cover and the rotation of crops. Agricultural systems that *rehabilitate* and conserve ecosystem could be as productive as or even more productive than practices specific to second part of past century, *but with significantly* reduced costs for the environment, and as a consequence for the society at large. Better conserved environment means better food, better health, and as a result a higher living-standard. In this paradigm man and nature are the focal elements, distancing it from high-input systems which are connected to extremely mechanized agriculture, chemicals, irrigation and large reservoirs schemes, land and capital concentration, and as a consequence, of power concentration.

The main opportunities to increase yield/surface depend on rein-fed system which is the main system responsible for current family *farming*, bringing the highest benefits related to rising livelihood and poverty reduction. Departing from capital and land concentration towards this family-farming system would come together with a *redistribution* of economic gains from top to a lower, but a larger part of society. This *distribution* will come with rising importance of this part of population which will press for a more responsible type of citizenry. An atrophied, sick and stressed society will give away in face of a more responsible, healthy and happier citizenry.

### 3. SUSTAINABLE LIFESTYLE

It has to do primarily with each individual and as a consequence with all of us. A new attitude regarding our priorities and a more active life-style will help us to better understand the importance of a healthy environment for our happiness and for a higher quality of life.

How could one reasonably argue for a consumption of a 0-calorie soft drink when its production, packing and transport involves calories' consumption? Since a diet soft drink has 1 calorie of energy, but there are needed in order to process it 600 calories, while for the production of the aluminum pack used to deliver it there being needed another 1600 calories [11], let alone trans-



portation and delivery energy costs, what economic arguments are there from the consumption point of view? From ecological point of view, it is a total disaster: 1 calorie consumed to produce something which gives back only 0.00046 calories is completely unsustainable.

Furthermore, due to their *size* and complexity, complex food industrial conglomerates have already crossed over a sustainable threshold in a world where energy is more and more expensive, and its price faces high volatility. As argument it could be brought here to reader's attention the American food industry's situation. It needs 10 calories of energy to generate 1 calorie [12] retrieved in food with questionable quality, containing hidden dangers.

Rising incomes in emerging economies comes together with changing in dietary customs; more meat is demanded globally because of this trend; even close to 1 billion people experience chronic food insecurity, the main part of world's corn and soybean, and a growing share of wheat are directed to create food for animals, for *meat production* [13]. Grass fed animals has given place to grain-fed ones, rising in the same time the demand for antibiotics' use to artificially confined cattle; of all antibiotics sold in the US, 80% are directed to be administrated to *healthy* animals for growth-enhancing and prophylactic purposes [14]. This brings with it great environmental, animal-health and *human-health* disturbances.

In a no water-waste scenario, to feed one adult one day with a whole vegetarian diet, there are needed some 700 liters of water, while in case the dietary elements are 20% beef based, the amount of water to create that food doubles [15]. Put it simply but in an extreme framework, *if every citizen would be vegetarian, water and food security and environment sustainability would be ensured* [16].

We should aim at an equilibrium searching for an important reduction, not a total elimination of meat consumption; staying *slim* is healthy for individual and for the good of the Earth.

#### 4. CONCLUDING REMARKS

Expanded at global scale a new attitude regarding ourselves and how we interact with the environment will bring gains which could be bigger than projected increases in global demand for water and food, directly contributing to conflict reduction among competing uses. This grass-root activity of society connected to food production and consumption will bring benefits such as:

- *In economic arena:* lower unemployment rate, increased self-sufficiency for a larger part of society in an increasingly unstable and unpredictable economic environment haunted by chronic (and repetitive) crises. A more local concentrated production and consumption places would press the economic system away from present day scenario; it will mean a lower energy need, which in present day is used to provide the functioning of global transportation networks for connection of distant production and consumption places, which is coupled to high capital concentration due to production (water projects and land concentration), storage (great storage capacities), chemicalization (chemical and seeds providers) and logistics (great transport enterprises especially, which in many cases act as geopolitical instruments to control distant economies and societies);
- *In social and psychological arenas:* rising citizens awareness regarding their life, restoration of traditional connections, regaining the central family's importance;
- *In medical area:* a healthier and happier people;

- *In environmental arena*: better conservation of vital resources (air, water and land) coupled with an increased awareness and conservation related to environment's components (forests, fisheries, flora and fauna);
- *In domestic politics*: a larger and stronger middle class, and as a consequence a more stable and pleased society, more aware about its destiny, and as such, a stronger democratic political system. It could better reconcile society with itself, as it would distance it from a political regime with oligarchic characteristics toward a regime with stronger democratic components;
- *In international arena*: a lower risk for conflicts generated by the desire to gain access to water, food, and energy resources.

All these indicate that it could be possible to bring relief on environment and society together, creating in the meantime the possibilities for *a happier and healthier individual enjoying a more stable society, a "greener" environment, and a more peaceful world.*

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# DO ENTERPRISES WHOSE COMPETITORS PARTICIPATE IN THE INFORMAL SECTOR SUFFER FROM LOWER LEVELS OF FIRM PERFORMANCE? AN EVIDENCE-BASED EVALUATION FOR THE CASE OF ALBANIA

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**Abstract:** *There is a wide belief that firms who operate into the informal economy negatively affect their competitors who operate in the formal economy. This paper aims to provide an evidence-based evaluation of this assumption in the context of Albania. Different official sources confirm Albanian's informal economy counts for around 40 percent of GDP. Unfair competition remains a huge obstacle of doing business. To evaluate the impact of informal competition into firms that operate fully formal, a survey is conducted using a national representative sample size of 400 firms operating in Albania, comprising all sizes and economic sectors. The linear regression analysis is employed to develop the impact analysis. The results uncovered that firms whose competitors operate into the informal economy, have lower annual sales growth rates compared with those who admit that their competitors do not engage in the informal economy. The survey results have both theoretical and practical implications which are discussed at the end of the paper.*

**Keywords:** *firm performance, informal economy, Albania.*

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## 1. INTRODUCTION

There has been an increasingly interest of scholars to study enterprises that operate informally, meaning those who do not register and/or hide a part of sales to authorities for tax and/or labor law purposes (Siqueira et al., 2014; Ram et al., 2017; Williams et al., 2017). There are two arguments the literature highlights as motivation to study informal sector. First, there are over one half of all enterprises globally that are not registered (Acs et al., 2013), and there is a larger number that under-report their sales (Williams, 2018). Second, the informal enterprises represent a big obstacle to formal enterprises and its prevalence negatively impact the performance of formal enterprises (Lewis, 2004; Webb et al., 2013). This paper aims at examining the impact of informal entrepreneurship into the performance of firms that operate formally. The results are reporting from a survey of 400 businesses in Albania, with a representative sample. This paper provides some evidence of that enterprises admitting that their competitors engage into informal economy, are inclined to have lower annual sales growth rates compared with those admitting that those competitors do not operate informally. This provides arguments for policy makers to design effective policy measures to tackle informal economy in Albania.

This paper starts with a literature review, outlining at a glance the literature on informal sector entrepreneurship. The third section introduces the data followed up with the results. The final section closes with theoretical and policy implications.

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## 2. INFORMAL SECTOR COMPETITION AND FIRM PERFORMANCE

Theories (modernization and structuralist perspectives) highlight that formal enterprises are suffering due to the existence of unfair competition (Leal Ordóñez, 2014). In addition of the existence of business losses, governments on the other hand are losing regulatory control over work conditions (ILO, 2014) and tax revenue (Williams, 2014). Both theories emphasize that enterprises operating informally has a negative impact into the performance of enterprises that operate formally (Farrell, 2004; ILO, 2007). More specifically, the modernization theory considers informal sector competition inefficient toward formal enterprises. However, due to non-compliance with tax and/or labor authorities, informal enterprises are in advantage in terms of the price (La Porta and Shleifer, 2008). The same is accepted to be true for the structuralist perspective which depicts informal sector competitors as low-productive enterprises. However, these enterprises have low cost and so gain advantage compare with formal enterprises (Palmer, 2007). Besides all, the impact that informal enterprises have onto the performance of formal enterprises, is rarely tackled. Most of the literature on firm's performance have endeavored to study the lower productivity of informal enterprises. This poorer performance thesis has been approved by various empirical studies (Farrell, 2004; McKinsey Global Institute, 2003). When it comes to the impact of informal entrepreneurship into the firm's performance operating into formal sector, there are rare or none studies that examine this relationship. Nevertheless, there is a wide belief that formal enterprises whose competitors operate informally, have lower firm performance (Lewis, 2004; Webb et al., 2009).

To test this main hypothesis two things are essential. First, the examination of informal typologies is important in order to know how the firms could engage into informal economy. Second, the way how the firm performance is measures, should be elaborated. For the first thing, the wide literature identify at least three manners businesses could engage into informal economy: Hiding/not paying taxes, duties and/or excises (Williams, 2006), performing illicit import/export and siphoning of VAT (VAT fraud using accounting tricks). In terms of the firm performance, a well-known measure used is the annual sales growth (Williams et al., 2017). Hence, these hypotheses seek to be tested:

- H1:** Formal enterprises whose competitors always/in most cases, do not pay their full taxes, have lower annual sales growth compared with enterprises whose competitors never do so.
- H2:** Formal enterprises whose competitors always/in most cases, engage in the illicit exporting or importing of goods, have lower annual sales growth compared with enterprises whose competitors never do so.
- H3:** Formal enterprises whose competitors always/in most cases, engage in VAT fraud, have lower annual sales growth compared with enterprises whose competitors never do so.

## 3. DATA AND VARIABLES

### 3.1. Data

To evaluate the hypotheses data is reported from a survey with 400 Albanian enterprises, comprising micro, small, medium and large firms and including all economic sectors. The Albanian Center for Economic Research (ACER) conducted the field work in 2015 and the author lead the

research project. To fill the questionnaire, the field-work team used the face-to-face method. Interviews were held with Owner, Executive Director, and/or Financial Director of the enterprise, considering the typology of information the instrument required. The random selection method was chosen to pick up enterprises from the existing General Tax Directorate (GTD) data base. The stratified sampling procedure was pursued, considering two variables, size (1-4; 5-9; 10-49; 50 or more employees) and sector (Agriculture, forestry and fishing, Accommodation, Trade, Industry, Transport, Construction, Other services, Information).

### 3.2. Variables

The linear regression analysis was deployed to test the hypothesis. In this paper the annual sales growth in percentage is the dependent variable which implies the change in percentage of the current fiscal year compare with three years ago. In this paper there are three independent variables explained as below:

- *Hiding/not paying taxes, duties and/or excises*: a categorical variable based on the question “How often would you say are the following practices are occurring within companies/firms in your sector – that is – those that are your direct competitors? Hiding/not paying taxes, duties and/or excises”. 1=never, 2=sometimes, 3=in most cases/always.
- *Performing illicit import/export*: a categorical variable based on the question “How often would you say are the following practices are occurring within companies/firms in your sector – that is – those that are your direct competitors? Performing illicit import/export”. 1=never, 2=sometimes, 3=in most cases/always.
- *Siphoning” of VAT (VAT fraud using accounting tricks)*: a categorical variable based on the question “How often would you say are the following practices are occurring within companies/firms in your sector – that is – those that are your direct competitors? “Siphoning” of VAT (VAT fraud using accounting tricks)”. 1=never, 2=sometimes, 3=in most cases/always.

Two control variables are used drawing on other studies (Williams and Horodnic, 2017a, b) described below:

- *Sector*: A categorical variable describing the economic sector: 1= Agriculture, forestry and fishing, 2=Accommodation, 3=Trade, 4=Industry, 5=Transport, 6=Construction, 7=Other services, 8=Information.
- *Firm Age*: A categorical variable describing how many years has the company been operating: 1= less than 5 years, 2=6–10 years, 3=11–20 years, 4=more than 20 years.

## 4. FINDINGS

The effect of informal sector competition into the firm’s performance has been evaluating using the linear regression analysis which reports data from 400 firms operating in Albania. Four models which are displayed in Table 1, are used to specifically evaluate the impact of different typologies of informal sector on the firm’s performance. So, Model 1 evaluates the results for the control variables (independent) to see if the firm performance varies depending on economic sector and years of experience. Model 2-4 evaluates separately the independent variables one by one. So, model 2 whether it is usual for Albanian firms not to pay all taxes, model 3 whether it is usual for Albanian firms to perform illicit import/export and model 4 whether it is usual Albanian firms to perform VAT fraud.



Model 1 provides evidence that firm performance does not vary significantly by economic sector and years of experience. To evaluate the hypothesis that enterprises whose competitors always, or in most cases, participate in the informal sector suffer from lower levels of annual sales growth than those whose competitors never do so, model 2 displays that enterprises whose competitors always, or in most cases, do not pay their full taxes owed are more likely to suffer from lower levels of annual sales growth than those whose competitors never do so (confirming H1). Model 3 displays enterprises whose competitors always, or in most cases, engage in the illicit exporting or importing of goods are not significantly more likely to suffer from lower levels of annual sales growth than those whose competitors do not (not confirming H2) and enterprises whose competitors always or in most cases engage in VAT fraud do not suffer from lower levels of annual sales growth than those whose competitors never engage in VAT fraud (not confirming H3).

**Table 1:** Linear regression results

	Model 1	Model 2	Model 3	Model 4
	Coefficient (Standard error)	Coefficient (Standard error)	Coefficient (Standard error)	Coefficient (Standard error)
<b>Sector (RC: Agriculture, forestry and fishing)</b>				
Accommodation	1.008 (3.453)	.571 (3.480)	-.492 (3.775)	-.413 (3.682)
Trade	.056(3.361)	.113 (3.372)	-.457 (3.569)	-.521 (3.564)
Industry	-.917 (3.414)	-1.190 (3.432)	-1.652 (3.628)	-2.004 (3.622)
Transport	.404 (3.699)	.106 (3.725)	.559 (3.902)	.150 (3.899)
Construction	-5.961 (3.775)	-6.136 (3.815)	-3.794 (4.138)	-6.996 (3.989) *
Other services	1.391 (3.401)	.699 (3.436)	1.614 (3.695)	.455 (3.659)
Information	-2.391 (4.892)	-2.731 (4.902)	-2.857 (5.069)	-3.248 (5.052)
<b>Years of experience (RC: Less than 5 years)</b>				
6-10 years	-.203 (1.481)	-.494 (1.517)	-.269 (1.661)	-.485 (1.538)
11-20 years	-1.689 (1.399)	-1.877 (1.414)	-2.456 (1.564)	-2.226 (1.459)
More than 20 years	-2.128 (2.081)	-1.778 (2.107)	-2.187 (2.260)	-1.873 (2.165)
<b>Hiding/not paying taxes, duties and/or excises (RC: Never)</b>				
<i>Sometimes</i>		-1.293 (1.556)		
<i>Almost always/often</i>		-2.544 (1.388) **		
<b>Performing illicit import/export (RC: Never)</b>				
<i>Sometimes</i>			1.360 (1.691)	
<i>Almost always/often</i>			.948 (1.640)	
<b>“Siphoning” of VAT (VAT fraud using accounting tricks) (RC: Never)</b>				
<i>Sometimes</i>				.039 (1.463)
<i>Almost always/often</i>				1.239 (1.297)
(Constant)	3.174 (3.372)	5.222 (3.619)	3.412 (3.647)	3.794 (3.618)
Number of observations	384	375	320	361
<b>R2</b>	<b>0.038</b>	<b>0.047</b>	<b>0.035</b>	<b>0.044</b>

## 5. DISCUSSION AND CONCLUSION

Drawing on the data reported from 400 enterprises in Albania and the results of a linear regression analysis, it is concluded that informal sector competition negatively affects the firm performance. In other words, those companies whose competitors always, or in most cases do not pay their full taxes, are more inclined to have a lower annual sales growth. However, this does not seem to be true for all typologies of informal engagement (VAT fraud and illicit import/export).

Theoretically, these findings have implications. It confirms that unfair competition destroys the rules of the game and this is reflected into the firm performance of formal competition.

However, this holds true for a type of informal engagement out of three stated out. In addition, this is true for Albania only. Hence, a wider representative survey in other countries should be conducted.

As a summary, this paper uncovered that informal enterprises negatively impact the firm performance of formal enterprises. This paper has the intention to foster policy makers to think about different policy approaches to effectively tackle the informal sector in Albania. If this happens, then it has achieved its aim.

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# SYNTHETIC INDICATORS OF SUSTAINABLE DEVELOPMENT AND THE ROLE OF HUMAN CAPITAL

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**Abstract:** *With the adoption of the Agenda 2030, the concept of sustainable development was formally accepted as the dominant development paradigm at the global level. Sustainability in the context of sustainable development does not mean maintaining the status quo, but preserving development opportunities, which is very important for future generations, as well as from the point of view of measuring sustainable development. Among the synthetic indicators that measure sustainable development in a comprehensive manner, special attention should be paid to wealth of nations and adjusted net saving. Wealth is broadly defined to include produced capital, natural capital, human capital, and net foreign assets. Human capital, according to research by the World Bank is the most important component of wealth at the global level and for most countries. The convergence in wealth that is observed between middle-income and high-income countries during the period 1995-2014 is mostly due to the accumulation of human capital, which have raised from massive investments to improve education and health outcomes. The aim of the paper is to point out the significance of measuring sustainable development, as well as the advantages in the use of synthetic indicators, such as wealth and related adjusted net saving. The focus is on the role of human capital in selected synthetic indicators as the leading factor for sustainable development in the 21st century. Measuring of changes in the volume and composition of total and per capita wealth over 20 years in 141 countries, carried out by the World Bank, permits us to monitor, analyze and compare the sustainability of development process worldwide. This is also possible by using adjusted net saving, which help us understand some of the dynamics that drive the changes in wealth. Paper also provides insight into how available wealth and adjusted net saving data can be used to guide a policy towards sustainable development.*

**Keywords:** *Sustainable development, synthetic indicators, wealth of nations, adjusted net saving, human capital.*

## 1. INTRODUCTION

Although most of the world's countries are exposed to a strong pressure from short-term priorities, there has been a huge increase of interest in economic development sustainability at the long run. This is supported by the fact that the Millennium Development Goals, the realization of which is timed by 2015, are replaced by a new global development agenda focused on achieving the Sustainable Development Goals in the next fifteen-year period. Sustainability in the context of sustainable development does not mean maintaining the *status quo*, but preserving development opportunities [1]. This implies responsible behavior towards future generations, regardless of the fact that they do not have the right to vote and cannot influence the creation of a current policy. Sustainable development represents a new approach to understanding development, which

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is substantially different from the paradigm of conventional development. It is expected from the sustainable development to better link short- and long-term development horizon, to place at the same level social, environmental and economic interests, to effectively harmonize the social and individual scale of preferences and interests, to correct market failures and internalize the social and environmental in economic expenses, to minimize the failures of the state through the development of a partnership between the state, private sector and civil society [2].

In order to monitor the progress of individual countries towards sustainable development, it is necessary to define appropriate indicators of this process. Multidimensionality of sustainable development, which encompasses economic, social and ecological component, makes its measurement very difficult. In the literature, various measures of sustainable development are defined, among which special attention deserve synthetic indicators that measure sustainable development in a comprehensive manner. This group includes complex indicators such as national wealth and adjusted net saving.

## **2. NATIONAL WEALTH AND ADJUSTED NET SAVING AS A SYNTHETIC INDICATORS OF SUSTAINABLE DEVELOPMENT**

The concept of national wealth is broadly defined to include different types of capital: produced capital, natural capital, human capital, and net foreign assets. There is a close connection between the indicators of national wealth and sustainable development. While the Brundtland Commission defined sustainable development from the point of view of meeting the needs of current and future generations, in later interpretations, the emphasis is on preserving and increasing the opportunities available to people in different parts of the world and at various points of time (as it became clear that needs cannot be so easy to compare between countries and over time). Thus, from the indicators of the flow of economic activity (such as gross domestic product), the focus has shifted to the indicators of stocks of different forms of capital. Total national wealth, ultimately, determine the opportunities that people will face.

The process of sustainable development is, in essence, the process of creating and maintaining wealth, that is, managing such wealth. Putting an emphasis on wealth suggests a new approach to economic development. Unlike traditional concept of development, which in the first place has the construction of infrastructure, development is now understood as «portfolio management», i.e. the process of managing a portfolio of different types of capital, in order to preserve and multiply the opportunities available to people [3].

Wealth, provides useful information to policymakers. Decreasing total wealth per capita is a clear sign that country's development is not sustainable. On the other hand, preserving stocks of wealth or their increase provides the basis for maintaining or improving well-being.

Adjusted net saving (ANS) is a complementary synthetic indicator of sustainable development, which provides a better understanding of the process of wealth-building on an annual basis. Unlike national wealth as a measure of stock, it is a measure of flow, which indicates changes in the wealth of the country.

The procedure for calculating ANS can be presented in four steps. First of all, gross national saving is reduced by the depreciation of produced capital in order to obtain net saving. Then, current education expenditures, which are treated as investments in human capital, are added to

net saving. In the next step, the estimated amount of resources depletion (subsoil assets, timber resources) is subtracted. Finally, when the cost of air pollution damage to human health is deducted, remains the so-called adjusted net saving [4].

Measurement of ANS provides an additional set of information for policy makers. Permanent negative saving clearly shows that the economy is not moving along the path of sustainable development, i.e. that opportunities to increase future well-being may be wasted for short-term gains. Conversely, if ANS is positive, it adds to wealth and future well-being. Breaking ANS into components makes it easy to take policy interventions to improve nation's ANS, such as increasing investment in education to boost human capital, improving air quality to reduce pollution damage costs, etc.

### 3. TRENDS IN WEALTH OF NATIONS AND ADJUSTED NET SAVING WITH SPECIAL EMPHASIS ON THE IMPORTANCE OF HUMAN CAPITAL

The need and interest for measuring national wealth are relatively recent and closely connected with the affirmation of the concept of sustainable development. The World Bank recently published a third report on wealth, which covers 141 countries of the world during the period 1995-2014 [5].

Unlike previous reports, total wealth is now calculated by adding the estimates of each of its components: produced capital, natural capital, human capital, and net foreign assets. For the first time, human capital is estimated directly on the basis of household surveys for all countries. It is calculated as the net present value of earnings over a person's lifetime.

**Table 1:** Wealth, by Income Group, 1995-2014  
Source: Lange, G-M., Wodon, Q., Carey, K. (eds.) (2018), p. 45

<i>Wealth (US\$)</i>				
	<i>Total</i>		<i>Per capita</i>	
<i>Aggregate (billions)</i>	<i>1995</i>	<i>2014</i>	<i>1995</i>	<i>2014</i>
Low-income countries	3,616	7,161	11,601	13,629
Lower-middle-income countries	35,249	70,718	17,718	25,948
Upper-middle-income countries	95,105	247,793	51,142	112,798
High-income non-OECD countries	40,886	76,179	163,827	264,998
High-income OECD countries	515,086	741,398	547,419	798,389
World	689,942	1,143,249	128,929	168,580

Based on the available data in Table 1, between 1995 and 2014 global wealth grew by a continuous average annual growth rate of 2.7%, and wealth per capita at a rate of 1.4% [calculated by the authors]. Growth in total wealth was followed by a significant reduction in its concentration in high-income countries, whose share declined from 75% to 65%, with a simultaneous increase in the share of middle-income countries from 19% to 28%, especially those that are somewhat more developed (higher-middle income).

However, inequality in the distribution of wealth is still very pronounced, as evidenced by the fact that low-income countries participate in the total wealth with less than 1% in 2014 and that



their share has remained almost unchanged compared to two decades ago. The per capita wealth of high-income countries in 2014 is 52 times higher than in low-income countries, and this ratio is worse.

A composition of total wealth also deserves attention. Human capital makes a lion's share of the wealth in the observed countries, although its share in total wealth declined from 69% in 1995 to 64% in 2014. This decline was registered only in richer countries, while in most developing countries, the share of human capital in total wealth is on the rise. The established trend will continue, as qualified labor is the key to future development in the face of rapid technological changes. According to the share in total wealth, after the human capital comes the produced capital, whose share over the observed period increased from 24% to 27%, and the natural capital that increased from 8% to 9% [5]. Natural capital is the most important in the initial stages of development when it significantly exceeds the produced capital. In countries with a middle level of income, its relative importance is roughly as produced capital. The continued importance of natural capital in low- and middle-income countries suggests that the management of natural resources should be an important part of their development strategy.

**Table 2:** Human capital per capita, by Income Group, 1995-2014  
Source: Lange, G-M., Wodon, Q., Carey, K. (eds.) (2018), p. 123

	1995	2014	Annual growth (%)
<b>World</b>			
Human capital per capita (US \$)	88,874	108,654	1.06
Human capital as share of total wealth per capita (%)	69	64	
<b>Low-income countries</b>			
Human capital per capita (US \$)	3,921	5,564	1.86
Human capital as share of total wealth per capita (%)	34	41	
<b>Lower-middle-income countries</b>			
Human capital per capita (US \$)	7,992	13,117	2,64
Human capital as share of total wealth per capita (%)	45	51	
<b>Upper-middle-income-countries</b>			
Human capital per capita (US \$)	31,906	65,742	3,88
Human capital as share of total wealth per capita (%)	62	58	
<b>High-income non-OECD countries</b>			
Human capital per capita (US \$)	57,319	111,793	3.58
Human capital as share of total wealth per capita (%)	35	42	
<b>High-income OECD countries</b>			
Human capital per capita (US \$)	408,992	498,399	1.05
Human capital as share of total (%)	75	70	

Table 2 presents the level and dynamics of human capital, as well as its share in the total wealth per capita in the analyzed period. Data show that for two decades in low-income countries, the share of human capital has increased from 34% to 41%, and in lower-middle income countries from 45% to 51%. Many of these countries are experiencing a demographic transition accompanied by a slowdown in the rate of population growth, while at the same time improving its educational level. On the other hand, in countries with upper-middle income level, the share of human capital in the total wealth per capita fell from 62% to 58%, and in the high-income OECD countries from 75% to 70%. However, it is clear that at higher levels of development, human capital is decidedly dominant.

An overview of growth rates in human capital wealth reveals that human capital growth is faster in countries with lower- or middle-income level than in developed ones, which points to a convergence process. This is even more pronounced when considering individual countries, because aggregated data give greater weight to larger countries.

Analysis by geographical regions, which includes low- and middle-income countries, provides an additional insight into the creation of wealth per capita, as a superior indicator of development than the total wealth. The best results in per capita wealth were shown by East Asia and Pacific, as well as South Asia, where average annual growth rate of 5.8% was achieved. In other regions, there was also an increase in per capita wealth, excluding Sub-Saharan Africa, where wealth per capita declined by 0.2% on average per year. An analysis of the countries within the Sub-Saharan region reveals that per capita losses of wealth affected a smaller number of large countries (such as Nigeria and Tanzania), while others achieved an increase.

Changes in the regional wealth composition point to the conclusion that the share of human capital has been reduced in the region of East Asia and Pacific, which is linked to the aging of the active population, but has increased in Europe and Central Asia, the region of South Asia, and also sub-Saharan Africa thanks to investment in education and increasing labor force.

Measuring wealth in different countries, in total and by individual components, is motivated by the concern for sustainable development, that is to preserve and increase the opportunities available to people. Bearing this in mind, it should continue with periodic wealth estimates to see changes in its size and structure. In the meantime, flow measures, such as the already mentioned adjusted net savings, could be used to manage the portfolio of different types of capital.

The World Bank's analysis shows that the ANS rate varies considerably among the regions of the world in the period 1995-2014. East Asia and Pacific, as well as South Asia, recorded a positive ANS rate of around 20% of GDP. In Latin America and Caribbean, the ANS is smaller, but its share in the GNI is still significant and around 10%. Sub-Saharan Africa, as the poorest region of the world, records the negative ANS almost every year of the observed period, owing primarily to the exhaustion of natural resources, while the contribution of education expenditures is positive. A deeper analysis by country shows that those who are rich in natural resources tend to have a negative ANS because they focus on the exploitation of natural resources in order to increase current income, but at the expense of future development (i.e. in an unsustainable manner). The „curse” of resource-rich countries is not inevitable. A positive example is Botswana, which has been very successful in achieving long-term growth and poverty reduction. This was largely the result of investing rents in building human capital, as a key resource of modern age.

It is important to note that the negative rate of the ANS is not quite a sure sign that the economy is on the unsustainable development path. The reason is the limitations in the calculation of ANS relating to agricultural land and human capital. If it is found that the rate of ANS in a country is -10%, policy makers should assume that the missing elements in the ANS calculation have grown at least for the same percentage, before they exclude the assumption that the development process is unsustainable [6].

#### 4. CONCLUSION

Wealth and adjusted net saving are important synthetic indicators of sustainable development that can contribute to the successful realization of the Sustainable Development Goals, and above all Goal 17, which relates to the strengthening the means of implementation and revitalization of the global partnership for sustainable development [7]. Within this goal, the calculation of wealth and ANS can affect the coherence of policies and institutions, by providing a common and sound analytical framework for assessing sustainable development, as well as to improve the achievement of targets related to data, monitoring and accountability. Efforts to define adequate wealth and saving measures are also on the line of creating indicators, complementary GDP, which measures progress in the direction of sustainable development. They also contribute to the strengthening of statistical capacities in developing countries, which is incorporated into Objective 17. In conclusion, the indicators of wealth and ANS attach great importance to human capital, that is, education and health, which are highlighted as specific UN targets for the coming period.

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# A COMPARATIVE STUDY OF INNOVATION-BASED AND IMITATION-BASED ECONOMIES IN THE ERA OF THE FOURTH INDUSTRIAL REVOLUTION

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**Abstract:** *Nowadays, we live in the era of the Fourth Industrial Revolution, in which the digitization, automatization and robotization process enabling the wider use of information and communication technologies reorganizes the operation of the economies. In previous research, innovation- and imitation-based economies have been classified using multivariate statistical methods to highlight the duality of technological progress. The Fourth Industrial Revolution offers an opportunity to reorganize global power relations; innovation followers can become innovation leaders due to new technologies, as well as, innovation leaders can lag behind without innovation. The World Economic Forum creates the new Global Competitiveness Index 4.0 which measures the relevant components of competitiveness in 140 countries in the era of the Fourth Industrial Revolution. This research aims to compare the economic performance of innovation- and imitation-based economies in the relevant field of technological progress based on GCI 4.0 using multivariate statistical methods.*

**Keywords:** *The Fourth Industrial Revolution, innovation-based economies, imitation-based economies, Global Competitiveness Index 4.0.*

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## 1. INTRODUCTION

Nowadays, we live in the era of the Fourth Industrial Revolution, when new technologies fundamentally change the operation of the economy. Digitization creates opportunities to improve economic efficiency which lead to productivity and economic growth. Technological changes are more complex and realize faster as before. Several empirical studies (e.g. [1], [2], [3], [5]) confirm that the higher-income countries are typically technologically more advanced, their innovation activity is more intensive and they create the majority of the innovations, in contrast to the lower-income countries, which are typically technology followers, and can adapt new technologies through the imitation of technological leaders. Based on this, technological progress happens in different ways in different countries of the world, depending on their income levels. In [7] Szalavetz pointed out that the relationship between innovation and growth is different depending on the distance from the technology frontier. Most countries of the world imitate, so technological progress is based on technology import and imitation, and there are only a few countries where innovations are created, which, therefore, may be regarded as true innovators. In the previous study ([4]), 139 countries were divided into two groups, innovation-based economies, where innovation activity is high, and imitation-based economies, where the innovation is not as important as in the other group. The theoretical basis of this classification was the concept of the World Technological Frontier which is capable to differentiate countries based on their technical, human and economic characteristics. We differentiated innovator and imitator countries with cluster analysis based on a novel indicator, technological-institutional environment index and GDP per capita. This classification can be used to compare the innovation activities of innovation performance groups in the era of the Fourth Industrial Revolution. This research aims to make a comparative study of innovation-based and imitation-based countries using the Global Competitiveness Index 4.0 created by the World Economic Forum.

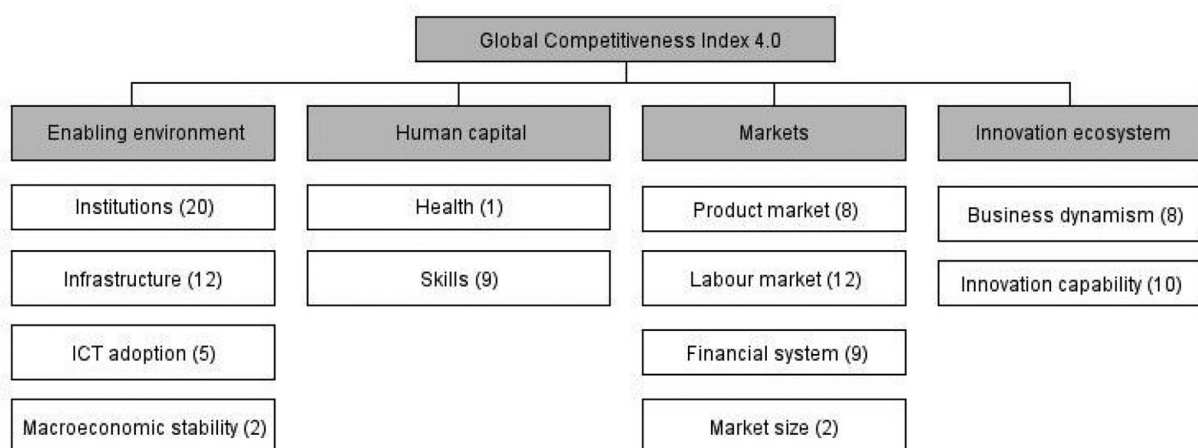
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## 2. RESEARCH QUESTION, METHODOLOGY

It is assumed that the economic performance of innovation-based countries is better than imitation-based ones in almost every field of competitiveness. Because of this, the research question is *in which areas of the Global Competitiveness Index 4.0 there are no significant differences between innovation- and imitation-based economies*. It is also important in which area there is the main difference between country groups. The new wave of technological progress creates an opportunity of reducing the technology gap between countries so we also try to answer the question of *whether imitation-based economies seem to be converged to innovation leaders*. The components of the Global Competitiveness Index 4.0 are compared in innovation- and imitation-based economies using parametric and non-parametric statistical methods.

The 2018 edition of the Global Competitiveness Report created by the World Economic Forum presents the *Global Competitiveness Index 4.0* which is the set of drivers of productivity and long-term growth in the era of the Fourth Industrial Revolution. There are twelve pillars of the new index grouped into four main categories and includes 98 indicators (*Figure 1*). The structure of this new index is different from the previous ones, 34 variables have been retained from the previous methodology while 64 indicators are new.



**Figure 1:** The composition of Global Competitiveness Index 4.0

Source: own construction based on [6]

According to the Global Competitiveness Index 4.0, there are four main categories which are required to a country becomes competitive in the era of the Fourth Industrial Revolution. The *enabling environment* includes variables from the field of institutions, infrastructure, ICT adoption, and macroeconomic stability. Most variables are in this group because these ones create the basic conditions of realizing technological progress which leads to competitiveness. The other important category is the *human capital*, mainly the skills as well as the indicators of the quantity and quality of human resources. *Markets* are necessary to acquire resources and essential for a successful business operation which leads to a firm becomes competitive not only in domestic but also in the international market. The fourth group is the *innovation ecosystem* which focuses on the innovative activities and their efficiency.

In this analysis, there are 131 countries, 23 innovation-based economies and 108 imitation-based countries. This classification is based on the previous research ([4]). *Innovation-based economies* are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland,

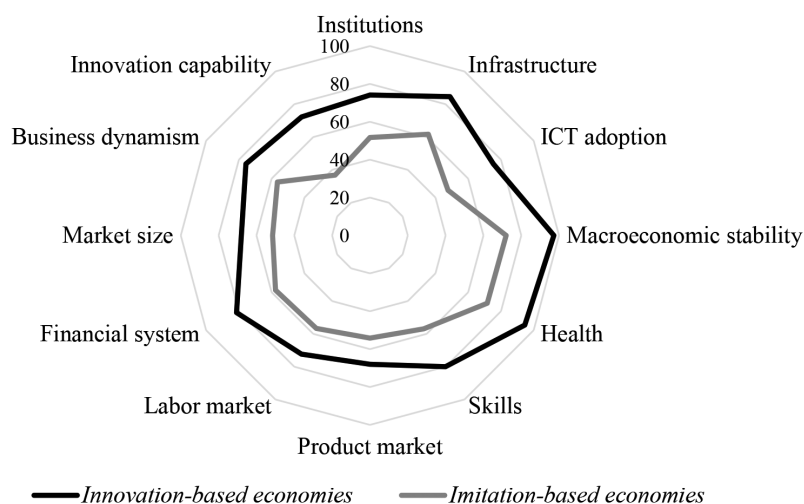


Israel, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Qatar, Singapore, Sweden, Switzerland, United Arab Emirates, United Kingdom, United States. *Imitation-based economies* are Albania, Algeria, Angola, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Chad, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, the Gambia, Georgia, Ghana, Greece, Guatemala, Guinea, Haiti, Honduras, Hungary, India, Indonesia, Iran, Islamic Rep., Italy, Jamaica, Jordan, Kazakhstan, Kenya, Korea Rep., Kuwait, Kyrgyz Republic, Latvia, Lebanon, Lesotho, Lithuania, Macedonia, FYR, Malawi, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nepal, Nicaragua, Nigeria, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Rwanda, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Slovak Republic, Slovenia, South Africa, Spain, Sri Lanka, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, Uruguay, Vietnam, Yemen, Zambia, Zimbabwe.

Using parametric and non-parametric tests, the performance of country groups is compared to highlight the significant differences between innovation- and imitation-based countries. Firstly, the normal distribution of variables is tested using Kolmogorov-Smirnov test. If a variable has a normal distribution, t test is used to compare the means of country groups. In other cases, when there is no normal distribution, Mann-Whitney U test is used.

### 3. EMPIRICAL RESULTS

As a first step in the analysis, innovation- and imitation-based countries are compared in the twelve pillars of Global Competitiveness Index 4.0 (see *Figure 2*). The highest difference between country groups is in the innovation ecosystem followed by enabling environment and human capital, while in markets they are not so far from each other.



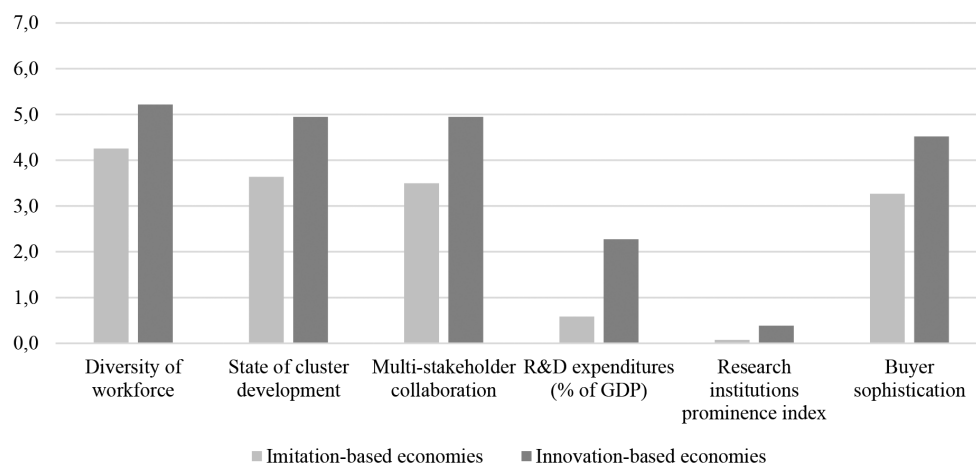
**Figure 2:** Differences between innovation-based and imitation-based economies in the twelve pillars of the Global Competitiveness Index 4.0

Source: own calculations based on [8]

*Figure 2* shows that the main difference between innovation- and imitation-based economies is in the field of innovation capability and the performance groups are close to each other in the field of product and labour market. In the innovation capability pillar, there are 10 variables.



The highest difference is in IP5 international patent applications (per million pop), in innovation-based economies, the number of international patent applications is more than 25 times higher than in imitation-based economies. The number of the patent application is more than 19 times higher; the trademark applications are only more than 5 times, while the scientific publications H Index is about 4 times higher in innovation-based countries than in imitation-based ones. Based on these results, we can conclude that there is a significant difference in innovation output between innovation performance groups. However, the patent and trademark protection are not as important as some years ago, because these forms of property right protection do not fit for the rapid technological changes. *Figure 3* shows the difference between country groups in the seven-stage scale variables of the innovation capability pillar.



**Figure 3:** Differences between innovation and imitation-based economies in the innovation capability pillar of the Global Competitiveness Index 4.0

Source: own calculations based on [8]

In the case of seven-stage scale variables, the highest difference between country groups is in R&D expenditures followed by multi-stakeholder collaboration and the state of cluster development. The R&D expenditures are important both innovation and adaptation of new technologies, i.e. imitation. The highest value of this ratio is 4,266% related to Israel followed by Korea with a 4,22 value while the lowest value is approximately 0. The multi-stakeholder collaboration measures what extent do people collaborate and share ideas within a company so this is an important indicator of knowledge transfer within a company. Clusters are geographic concentrations of firms, so they indicate a spatial form of collaboration and sharing knowledge between economic actors. Analysing the innovation capability pillar, we can conclude that imitation-based economies are lagging behind in knowledge transfer and in innovation output measured by patents and trademarks.

In the next step of the analysis, normal distribution of variables is tested. Based on the Kolmogorov-Smirnov test, there are 60 variables from the 98, which has normal distribution so Independent-Samples t test can be run to compare the means of innovation performance groups. There is another prerequisite of t test, it is the homoscedasticity which is tested by the Levene's test. Equal variances are not assumed in the case of 27 variables from 60 based on this test. In these cases, Welch's t test is used to compare means. As a result of this analysis, there is no significant difference between innovation- and imitation-based economies in 6 variables, such as *flexibility of wage determination* ( $P = 0,818$ ), *ease of hiring foreign labor* ( $P = 0,055$ ), *internal labor mobility* ( $P = 0,277$ ), *total tax on labor (%)* ( $P = 0,946$ ), *banks' regulatory cap-*

*ital ratio (% of risk-weighted assets)* ( $P = 0,654$ ) and *imports of goods and services (% GDP)* ( $P = 0,159$ ). These results support that innovation- and imitation-based countries are close to each other in the field of labour market, mainly in labour mobility. Labour market changes induced by technological progress cause labour migration not only within country, but also between country. This mobility occurs in both groups because of the skill and wage asymmetry. The labour market adaptation to the technological changes is required in all country independent from the current technological level. The other two variables related to the financial system and market size highlight that a stable financial market and international trade are also important not only for innovation but also for imitation.

There is no normal distribution in the case of 38 variables ( $P < 0,05$ ), so the Mann-Whitney U test is used to compare means. There is no significant difference between innovation- and imitation-based economies in 3 variables, *terrorism incidence* ( $P = 0,593$ ); *redundancy costs (weeks of salary)* ( $P = 0,091$ ) and *credit gap (%)* ( $P = 0,928$ ). The further 3 variables strengthen the importance of labour market and financial system and highlight the role of institutions.

Summarizing the empirical results, we can conclude that Global Competitiveness Index 4.0 measures well the country-specific characteristics of competitiveness and with this the technological progress in the era of the Fourth Industrial Revolution. Innovation is one of the main elements of competitiveness in this era; countries have to adapt to the challenges created by new technologies. The labour market adaptation is crucial, new skills are required, mobility has been intensified because of skill and wage asymmetry.

#### 4. CONCLUSION

In the era of the Fourth Industrial Revolution, when new technologies fundamentally change the operation of the economy, digitization creates opportunities to improve economic efficiency which lead to productivity and economic growth. Technological progress is the driving force of economic growth, but it can be realized by innovation and adaptation of existing technologies, i.e. imitation. Depending on the country's income level, innovation-based growth is associated with higher income level, while imitation fits for lower income level. This research aims to compare the economic performance of innovation- and imitation-based economies in the relevant field of technological progress based on Global Competitiveness Index 4.0. It is assumed that the economic performance of innovation-based countries is better than imitation-based ones in almost every field of competitiveness. Because of this, the research question was in which areas of the Global Competitiveness Index 4.0 there are no significant differences between innovation- and imitation-based economies. The country groups are close to each other in the field of labour market and in some elements of financial system. It was not surprising that the main difference is in the field of innovation capability, mainly in innovation output and knowledge transfer. The other question was whether imitation-based economies seem to be converged to innovation leaders. We can conclude that the group of innovation-based economies are homogenous, but in the imitator cluster there are some countries, e.g. China and Korea who show the signs of catching up to innovation leaders.

#### ACKNOWLEDGEMENT

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# EDUCATIONAL CHALLENGES OF E-LEARNING IN SPORT MAJORING HIGHER EDUCATION INSTITUTIONS

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**Abstract:** *Domain-specific cognitive competencies refer to generic skills, more specific to e-learning competencies in Physical education (PE) students over their academic lifespan. When higher education standards benchmark students' competence development, they relate to all educational stages. E-learning in sports sciences in Serbia is still being developed and is attracting attention of wider educational arena. Faculty of Physical Education and Sport in Nis wanted to contribute more to this area trying to diminish limiting influence of technical and cultural factors. Therefore, the University of Nis and National Sports Academy established distance learning centers for sports sciences to promote e-learning and higher-level diploma attainment. This, in itself, poses educational and economic challenges as well. This paper presents problems, advantages and drawbacks of this IPA Cross-Border cooperation project, how after one-year joint distance learning centers in Serbia and Bulgaria for sports sciences were accredited, and how students benefited from it in the labor market thus meeting economic challenges of introducing distance learning mode of instruction. However, the objective of this paper is not only to describe learning environment and assessment of learning outcomes, but also to emphasize e-learning specific teaching methods and perceived and realistically acquired skills and abilities. Sports sciences courses at the Faculty of Sport in Nis aim to develop generic and sports specific skills. The underlying theory used is Sloan-C Five Pillars managing the quality of online education, its effects, students' satisfaction, teaching staff commitment, price and investment returns, and access. They encompass: 1) mode of learning, 2) integration manner, 3) forms of learning content and objectives delivery, 4) variety of sports sciences teaching methods, 5) participation of learning subjects, and 6) place of teaching method execution. 81% employers' satisfaction survey results point to the justification of introducing the e-learning mode in sports sciences at the Faculty of sport and physical education in Nis, Serbia.*

**Keywords:** *E-learning, distance learning centers, educational challenges, generic and sports specific skills, labor market challenges.*

## 1. INTRODUCTION

Competitiveness promotes quality, and that is good for students. However, universities and higher education institutions need more operative freedom and appropriate funding in order to enter competition. Introducing new, different curricula will stimulate competitiveness. A fair competition will attract students from abroad. Competitiveness and collaboration do not exclude each other. Competitiveness, first of all, means academic quality and not just commercialization. Europe should try to become the kind of education space that would attract the best students from all over the world. However, this calls for a swift elimination of a number or inadequate laws to enhance labor market competition [1].

Specific measures proposed in Europe are: a) introduction of study programs taught in languages spoken worldwide, b) better marketing strategies in non-European countries, c) development of adequate services for foreign students to make them feel comfortable in European education institutions, d) being on par with other universities through strategic networking [7], [8].

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We cannot expect our students with their current competencies to be competitive in the world labor market. The same way as universities and higher education institutions must follow the laws of the labor market to survive the competition so must our students. Thus, generic competencies, social intelligence and specifically e-learning competencies of our students such as the capacity for analysis and synthesis, the capacity for applying knowledge in practice, basic general knowledge in the field of study, information management skills, interpersonal skills, the ability to work autonomously, elementary computer skills, research skills [2] must be developed along with all the other education related competencies.

## **2. ORGANIZATION CAPABILITIES**

Organizations in general need to acquire capabilities and competences in order to enter new product/market areas [16]. HEIs will therefore as well need to acquire new capabilities and competences to engage in e-learning because new skills are required [14]. Focus of many studies is on examining e-learning in higher education which are increasingly adopting this distance learning mode and at the same time posing question: what competencies and capabilities are required by HEIs engaging in e-learning? A definition and categorization of e-learning allows the description of e-learning by usage in terms of pedagogy, by timing in terms of synchronous or asynchronous, and by place in terms of distance of students: either face-to-face or distant.

The term capabilities refer to an organization's capacity to deploy resources using organizational processes [15]. Collis [17] divided capabilities into three categories of possible sources of organizational heterogeneity. First, those with an ability to perform basic functional activities of the organization, such as marketing, or brand management or operational excellence [18]. HEI such as those offering majoring sports sciences studies have recognized the need to enhance their offer as branding exercise and health promoting sciences as their main marketing entice. Second, those responsible for dynamic improvements to the organization, such as product innovation, the ability of the organization to learn and adapt, or flexibility in product development. While introduced first in 2014 as a result of the IPA project enabling the University of Nis and National Sports Academy to establish distance learning centers for sports sciences, both HEIs grabbed this way a chance to promote e-learning in their respective schooling systems and thus offer the international students' population a possibility of higher-level diploma attainment. Third category represents "more metaphysical strategic insights that enable firms to recognize the intrinsic value of other resources or to develop novel strategies before competitors" [17].

Knowing that distance learning mode is being increasingly used in higher education in Serbia, Faculty of sport in Nis strived to enter and stay in the distance learning market by widening their offer not just in Bachelor applied degree but also in Master studies cycle in sports sciences. To make it more attractive the Faculty joins forces with National Sports Academy in Sofia, Bulgaria, and creates mutual exercise and sports related sciences curricula offered to everybody interested in pursuing not just sports career but intending to obtain a valuable internationally recognized degree. Insisting on product innovation and the ability of the organization to learn and adapt and show flexibility in product development Faculty of sport introduced into the Masters study curricula as one of the most competitive products widely relevant and sought for area of Adaptive Physical Education [10], [11]. Thus, the Faculty has in short time become internationally recognized for its content relevant and broad scope inclusive Master degree of physical education and sport with specific reference in Adaptive Physical Education.

In the ongoing accreditation cycle Faculty of sport in Nis has applied to implement doctoral studies cycle in sports sciences in English language hoping to thus attract the international students and, in this way, increase their revenue and competitiveness on the market. This endeavor is not an easy task since all major cities in Serbia have for long established sports studies within their respective universities, namely in Belgrade, Novi Sad, Nis. A medium sized town Nis is putting all possible efforts to improve already existing e-learning, or better to say blended learning modes of distance learning. The result of such efforts is in the best possible way reflected in the fact that the Faculty of sport in Nis is now ranked between 150th and 200th place in the Academy Ranking of World Faculties list in the area of sports. With this significant progress, Faculty of Sport and Physical Education in Nis became the leading faculty in the region of Southeast Europe, finding itself far ahead of the faculties in Belgrade and Novi Sad, who held their position between 200th and 300th place this year.

### 3. EDUCATIONAL CHALLENGES - SOFT SKILLS

In recent leadership surveys, the number one leadership challenge cited by participants was developing management and people skills in technically-oriented people [3]. Although many professionals possess domain specific, they might have difficulty communicating this to others and motivating employees to achieve best results. Many things can create communication „gaps” [12]. Effective interpersonal communication involves a lot more than just the words we use. When we are face-to -face, nonverbal communication is the source of much of the information transmitted. When estimating and recommending educational related skills and competencies we usually apply Soft Skills List - with important sub-elements: Communication Styles, Teamwork, Leadership Skills, Effective & Excellent Customer Service, Decision Making & Problem Solving, Managing Time and Pressures, Self-Management & Attitude. The term Soft Skills is a broad topic. Below are some sample categories that might be applicable for any team and any profession, sports jobs not being an exception [6] [4].

1. Communication
  - Presentation skills,
  - Spoken communication,
  - Difficult conversations,
  - Professional writing,
  - Effective email writing.
2. Teamwork
  - Inter-team cooperation,
  - Intra-team cooperation,
  - Diversity,
  - Productivity,
  - Goal setting and action.
3. Leadership Skills
  - Empowerment,
  - Planning,
  - Confidence in leaders,
  - Vision & direction,
  - Supervision,
  - Coaching and/or mentoring.
4. Effective & Excellent Customer Service
  - Communication with the customer, including challenging conversations,



- Setting and resetting customer expectations,
  - Delighting the customer,
  - Building customer confidence,
  - A consistently winning customer experience,
  - Growing the customer relationship,
  - Opportunity management,
  - A Team approach to meeting the customer's needs.
5. Decision Making & Problem Solving
- Creativity,
  - Flexibility,
  - Team problem solving.
6. Managing Time and Pressures
- Change,
  - Time management,
  - Effective meetings.
7. Self-Management & Attitude
- Stress management,
  - Positive attitude and influence,
  - Initiative,
  - Concern and compassion for others [9].

We have to rely on the feedback of employers in the area of sport business. There was a comprehensive survey assessing the opinions of the region wide employers in sports business, posted on a web site of the Faculty of sport in Nis, showing overall satisfaction with our graduate students scoring high 81% satisfaction with their competence and domain specific knowledge in sport and physical education. However, they emphasized the need to install more and brush up their existing soft skills, since, it turned out our graduates are most frequently elected in the manager's position in primary and secondary schools, university settings and local community authorities. Thus, our graduates refer back to the faculty citing necessary requirements for better and more successful job finding in our still transitive economy. This is vital since the teachers when passing down specific knowledge and competencies also have to adapt learning communication skills throughout educational stages in specific distance learning mode study.

#### 4. CONCLUSION

It is obvious that complex job of e-learning based study programs in sports implementation requires the management attention in that (sport) students need to fulfill different web-based tasks and communicate them between their peers and teachers as well [11]. All the more important aspect of creating fully communicative persons in their respective profiles of studies turned to be interesting for further studies since students have to pass their final exams not web based but direct in person at the premises of the faculty. Thus, whatever content was posted on the Moodle platform now has to be communicated in real life situations, face to face with respective course teachers.

Our question about the significance of social competencies throughout life span was also validated through a survey within students both in bachelor applied and master sports and physical education study programs. A list of attributes or characteristic traits for prospective employees was drawn up and it starts with empathy - the ability to understand someone else's feelings

and re-experience them so one can actively listen to what others say, the second ranked was appreciation- one can understand and appreciate others' views, the third ranked was focus on attaining the goal or task without conflict, and the fourth ranked was understanding emotional boundaries. Thus, it was proved time and again that organizational awareness implies knowing how to do things within the organization, understand client and vendor organizations, and act with the client's best interest in mind.

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# DEVELOPMENT OF THE LEGAL REGULATION OF THE COOPERATIVE AS A FORM OF BUSINESS IN AGRICULTURE IN SLOVAKIA

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**Abstract:** *The paper analyzes the development of the legislation of cooperative law since the late 1940s. It points out the positives, but also the negatives in the development of agricultural cooperative in Slovakia. The number of cooperatives, as well as the area of their farmed land decreased significantly after 1989 and the number of legal entities operating on the land has expanded. In spite of this, however, according to the collected data, it can be stated that in 2018, cooperatives managed 34, 25% of agricultural land in Slovakia. Based on the available statistical data on the development of the structure of agricultural cooperatives and on the basis of legal analysis of the legislation, the authors wish to emphasize the merits of the cooperative form of business as well as the advantages of the cooperatives as a separate form of business under current market conditions. The cooperative, as a separated form of business, is still advantageous for all areas of business including the agricultural business. The advantage of a cooperative form of business is highlighted by its flexibility, relatively simple and more liberal than other legal form of business.*

**Keywords:** *cooperative, legal form, legal relations, development of legislation, agriculture.*

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## 1. INTRODUCTION

Emphasizing the historical development and importance of agriculture for the national economy, it can be argued that social relations in the area of regulating the forms of farming on land have always been in the focus of the whole society. The social interest aimed at regulating the legal relations of entities farming on agricultural land has been reflected in many legislative adjustments in recent decades. However, it should be stressed that the development of formal sources of law, as well as the subject of their regulation, reflects and materializes the social conditions in which the relevant legislation is created.

## 2. MATERIAL AND METHODS

Legal form of the cooperative underwent complicated development. According to the applicable legislation, the cooperative is a business entity traditionally active mainly in the field of agricultural business.

The aim of the paper is to point out, on the basis of a legal analysis, the development of the law of cooperative law from the end of the 1940s and on the basis of the comparison and logical

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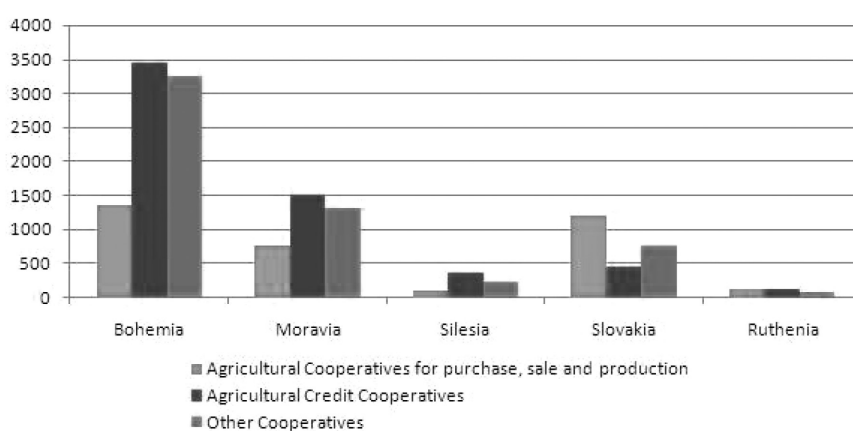
method of cognition, the positives and negatives in the development of agricultural cooperatives and the advantages of current legislation. The paper uses logical methods, formal legal methods, and sociological methods, especially the methods of examining various documents that preceded or accompanied the creation of normative legal acts.

### 3. RESULTS AND DISCUSSION

#### 3.1. Historical development of cooperatives in Slovakia

In 2019, we commemorate the 174th anniversary of the beginning of the cooperative movement in Slovakia with the foundation of the Association *Gazdovský spolok* in the village Sobotište. It was the first credit cooperative in the world. The guiding principles of this Association were voluntary entry, self-help, reciprocity and self-government. According to its model, other cooperatives and associations were established in almost all of Slovakia.

One of the first legal regulations of cooperatives in our territory can be considered the Hungarian Commercial Code, legal article XXXVII/1875, supplemented by the Cooperative Law, the legal article XXIII/1898 on economic and trade credit cooperatives (Šúbertová, 2004). The general regulation of cooperatives was enshrined together with trading companies in the first part of the Hungarian Commercial Code. A cooperative has been set up as a form of trading company, consisting of an indefinite number of members, created for the purpose of joint business management or other economic purpose. The Hungarian Commercial Code remained valid in Slovakia even after the establishment of the Czechoslovak Republic.



**Figure 1:** Overview of cooperatives in Czechoslovak republic in early 1924  
Source: own processing at the Department of Law according to Demo et al.:  
History of Agriculture in Slovakia (Table 12.1 p. 444)

Despite the unification efforts (Gábriš, 2012) in the period of the first Czechoslovak Republic, the commercial law failed to unify. During the entire existence of the first Czechoslovak Republic, the second Czechoslovak Republic and the Slovak State, the former Austrian Commercial Code of 1863 still applied in the Czech lands and the Commercial Code of 1875 still applied in Slovakia. This means that the legislation of the cooperative was also split into two commercial codes. The legal situation lasted until 1950, when the Civil Code no. 141/1950 Coll. has been adopted, which repealed both commercial codes, except for the provisions governing cooperative law. Figure 1 is an overview of the number of cooperatives in the mid-1920s throughout the Czechoslovak Republic. According to Demo et al. (2001) from most of the total number of

14,924 cooperatives, 3,479 were agricultural, purchasing, selling and production cooperatives and 5,852 were agricultural credit cooperatives.

The constitutional development after „February 1948” was influenced by the political conditions of its origin and the changes that occurred in all areas of the state’s social life. The Constitution of the Czechoslovak Republic, established a people-democratic establishment where the people are the source of all power in the state.

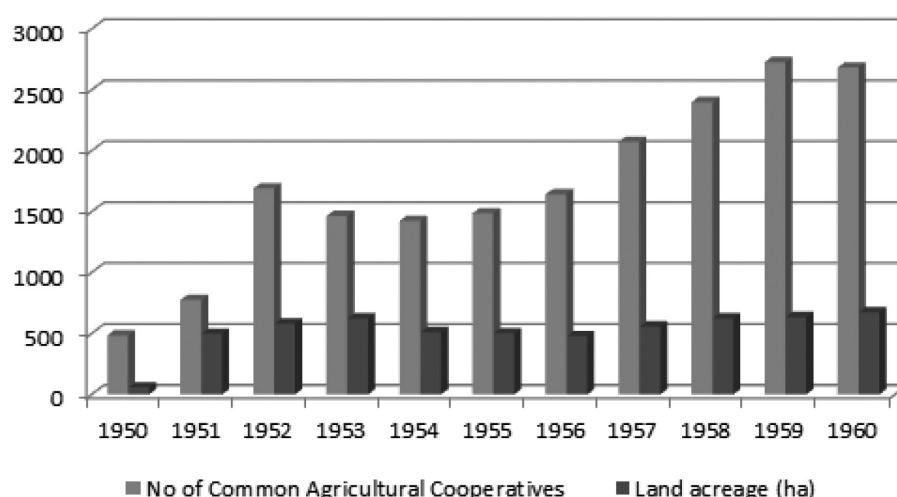
The empowering provisions laid down in the Constitution of the Czechoslovak Republic concerning the ownership of agricultural land were elaborated in Act no. 69/1949 on Common Agricultural Cooperatives (hereinafter referred to as the CAC Act or the Act). The CAC Act constituted and established a normative regulation of the rebuilding of agriculture by the association of individual farmers. It was a simple framework regulation that within 14 paragraphs enshrined and brought substantial changes in the life of farmers and substantial changes in land management. The aim of the legal regulation was to eliminate the existing fragmentation of cooperative activities in agriculture, to unite various agricultural cooperatives by voluntary establishment of common agricultural cooperatives.

The first stage of searching for a suitable type of cooperative and collective founding of common cooperatives represented by Act no. 69/1949 Coll. ends with the adoption of Act no. 49/1959 Coll. on CAC (with effect from 1 October 1959), by which begins the second stage of development of agricultural cooperatives, namely the stage of consolidation and development of common agricultural cooperatives (§1 of the Act). By its modification and content, the second CAC Act is the holder of all socio-economic conditions for the development of Czechoslovak society at that time. The members of the cooperative were obliged to associate the lands, including forest lands, for the cooperative management in the scope and under the conditions determined by the Statutes, while the ownership of the associated land remains intact and the cooperative acquires the right to cooperative use. This legal regulation gave preference to the right of use before the right of the owner. Although the ownership of the land belonging to the cooperative was retained to the members, they lost one significant ownership right, namely the right to dispose with the land, because the Act stipulated the restriction of the owner of the associated land to be disposed of or burdened.

The second Act on Common Agricultural Cooperatives (Act no. 49/1959 Coll.) significantly contributed to the development of the cooperative movement in agriculture, to the consolidation of the cooperative form of farming on agricultural land and to the development of legal relations in cooperatives. The legal regulation reflects the then existing political, social and production relations, which were also reflected in the newly adopted Constitution of the Czechoslovak Socialist Republic (Constitutional Act no. 100/1960 Coll.). Figure 2 is an overview of the common agricultural cooperatives over the ten-year period 1950 – 1960. In 1960, the number of cooperatives increased to 2,683, which were farming on 65.8% of agricultural land.

The CAC Act was effective for 15 years until the adoption of the new statutory regulation by Act no. 122/1975 Coll. on Agricultural Cooperatives, by which starting a new stage of development of agricultural cooperatives, namely the stage of development of agri-food complex and concentration of production based on specialization and merging of cooperatives. The legal regulation emphasized the importance of the socialist agricultural cooperative and its state management and the nature, tasks, subject of activity and management of the cooperative have been established.





**Figure 2:** Establishment of common agricultural cooperatives (CAC) of the type III and IV in Slovakia until 1960

Source: own processing at the Department of Law according to Demo et al.:  
History of Agriculture in Slovakia (Table 12.6 s.462)

The effectiveness of the Act on Agricultural Cooperatives lasted until July 1 1988, when the new Act no.90/1988 Coll. on Agricultural Cooperatives. The new Act on Agricultural Cooperatives does not bring major changes compared to the previous regulation. It is more transparent in the regulation of the legal status of the members of the cooperative, because in one part it regulates both the member and labour relations of the members, the cooperative discipline and the disciplinary measure. In addition to this Act, the labour relations of the members were governed by an amendment in their own statutes and, supportively, by the Labour Code.

Same as the previous regulation, the Act is based on the regulation of the right of cooperative use of associated land, which provides it for free and in unlimited time and entitles the cooperative to use land for fulfilling all its tasks. For the first time, the Act provides for the pursuit of foreign-economic activities and the establishment of a foreign exchange fund when regulating the cooperative's subject of activity.

On 15 May 1990, the third Act on Agricultural Cooperatives (Act no. 162/1990 Coll.) were adopted and entered into force. The provisions of the Act reflect the social, economic and constitutional changes of the „velvet revolution“. In the first and the second part of the legal regulation, in addition to the conceptual definition of the „cooperative“, the formation of the cooperative and the requirements of the statutes were modified. The statutes stipulate among the mandatory requirements for the first time a provision on the amount and manner of determining the amount of a member's share, or basic membership fee or other ownership interest, the types and methods of their creation, use, evaluation or amortization, the method of subscription and their arrangement at cessation of membership. In addition to this regulation, the Act documents the effort to transform existing cooperatives into share cooperatives.

Based on the requirements of the given period, the Act contains a regulation of an agreement negotiated between the cooperative and members or other citizens on joint production. The Act allows the establishment of self-help cooperatives of farmers, which can be set up by citizens carrying out agricultural activities. The third Act on Agricultural Cooperatives was repealed by the Commercial Code, which entered into force on 1 January 1992.

The Department of Law of the Slovak University of Agriculture in Nitra in its research activities, in cooperation with practice, consulting and advisory activities, has gained much knowledge on past development from former self-employed farmers, members of cooperatives, cooperatives' managers, students and their family members and other citizens for whom the development of agriculture was not indifferent. Opinions and findings can be divided into two groups: (1) the group whose opinions condemning the development and its negative impact on private farmers and (2) the second group of views on the development of the cooperative as well as on the development of the relevant co-operative legislation, which understands this process positively. Critically assessed is the violation of the voluntary principle when entering the cooperative in the first stage of the cooperatives' establishment, either directly, e.g. by criminal prosecution of many resistant farmers, their displacement, various forms of intimidation of family members, or indirectly, by burdening private farmers with high mandatory supplies of agricultural products, so-called contingents in order to provide enough food for the post-war period, which actually forced the farmers to enter the CAC. Negatively assessed are the right of association of agricultural land and the creation of a new original right of cooperative land use, which prevailed over the land ownership right of individual cooperative members. Part of the right of use of the land was free of charge. According to the opinions, the cooperatives, in particular in the late 1950s and early 1960s, were economically stabilized and had sufficient funds to pay the rent for land use. From the 1970s, the process of merging agricultural cooperatives violating the principle that one agricultural cooperative should be established in each municipality is critically perceived. Although the large complexes have been created by merging cooperatives, where large-scale technology has been used more effectively, at the same time, the immediate relationship, the daily care of members for „their municipal cooperative”, has disappeared and the merged cooperatives themselves have invested more in the development of the municipality in which they had their seat.

The second group of views on the development of the co-operative as well as on the development of the relevant co-operative legislation understands this process positively. According to these opinions, cooperatives have made a significant contribution to the development of agriculture and thus to rural development. Cooperatives have played a positive role in ensuring self-sufficiency in the production of plant and animal products, and the share of agricultural cooperatives in the development of rural employment is also important.

### **3.2. Development of agricultural cooperatives after 1990**

The social and economic changes after 1989 also meant serious property and organizational impacts for cooperatives.

The basic regulation governing the legal status of cooperatives was the Commercial Code adopted in 1991 (Act no. 513/1991 Coll.), which established a common legal form of a cooperative regardless of the subject of activity. In terms of legislation, a cooperative is a business entity, a community of open number of persons, established for the purpose of carrying out business or providing for its members' economic, social or other needs. It differs from trading companies by the special regulation of internal relationships between the cooperative and members and between individual members. In its provision § 765, the Commercial Code imposed on cooperatives that were established prior to its entry into force (1 January 1992) to be converted into companies or cooperatives governed by the Commercial Code by a procedure governed by a separate act. This act was Act no. 42/1992 Coll. on the regulation of property relations and settlement of property claims in cooperatives.

In addition, other legislation was gradually approved to implement structural changes in agriculture, through which the transition from a centrally planned economy to a market economy should be carried out. These changes were enshrined in the Constitution of the Slovak Republic.

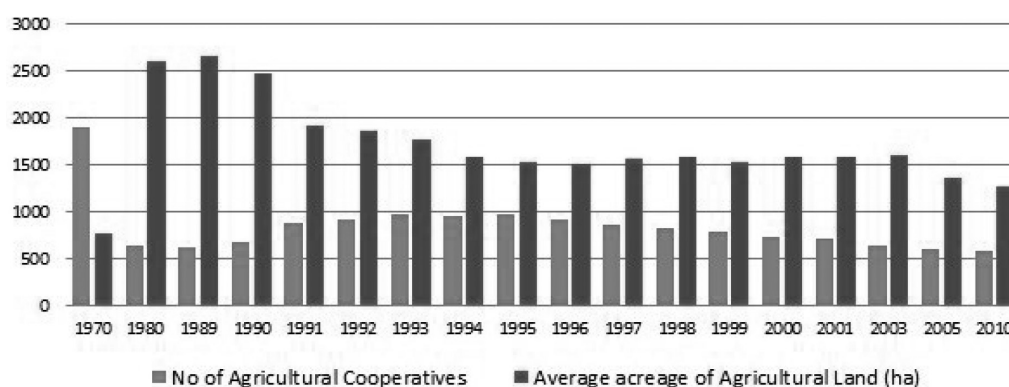
Land-based business activities have been significantly affected by property restitution: Act no. 403/1990 Coll. on mitigation of some property injustice; Act no. 87/1991 Coll. on Extrajudicial Rehabilitation; Act no. 229/1991 Coll. on regulation of ownership relations to land and other agricultural property as amended (the First Restitution Act); Act no. 503/2003 Coll. on restitution of ownership to land (the Second Restitution Act). The privatization of state-owned enterprises was regulated by Act no. 92/1991 Coll. on conditions of transfer of state property to other persons (Act on Large-Scale Privatization).

Even before the process of cooperative transformation, the cooperative regulation mentioned in Act no. 427/1990 Coll. on the transfer of state ownership of certain entities to other legal entities and physical persons (Small Privatization Act), which blocked cooperatives from obtaining shares in privatized food production and commercial establishments. This avoids the connection between primary production represented by agricultural cooperatives with processors and trade.

The process of transformation of agricultural cooperatives itself was carried out on the basis of Act no. 42/1992 Coll. on the regulation of property relations and settlement of property claims in cooperatives (the so-called Transformation Act). The most important amendments were Act no. 264/1995 Coll. and Act no. 3/2005 Coll. The Transformation Act established firstly, method of regulation of the property relations and settling property claims in cooperatives by designating eligible persons, evaluating cooperative assets, quantifying net worth, determining the ownership shares of beneficiaries, developing and adopting a transformation project; secondly, method of adapting the internal legal conditions of the cooperative to the Commercial Code and thirdly, eligible persons could also opt for a different form of business than the cooperative; therefore the Act also stipulated the method of converting cooperatives into other business forms under the Commercial Code. As a result of the transformation of the cooperative, a transformation project was approved, which included a decision on the further existence of the cooperative or its transformation into a business company.

According to opinion of Lazíková and Bandlerová (2005), there are two groups of cooperatives that exist in Slovakia since the 1990s. There are (1) cooperatives that have not undergone a transformation process (cooperatives established after 1992), which already have a better starting point for doing business by not having started to act as indebted entities; and (2) cooperatives that have undergone a transformation process (cooperatives established before 1992). A special feature of transformed cooperatives is the fact that property rights in them have persons who are not their members. This situation is disadvantageous for both parties. On the one hand, there are eligible persons who are not members of the cooperative but have property rights in it, but cannot interfere with the management of the cooperative as the members of the cooperative. On the other hand, there are the cooperative members, who are not the exclusive owners of the cooperative's assets.

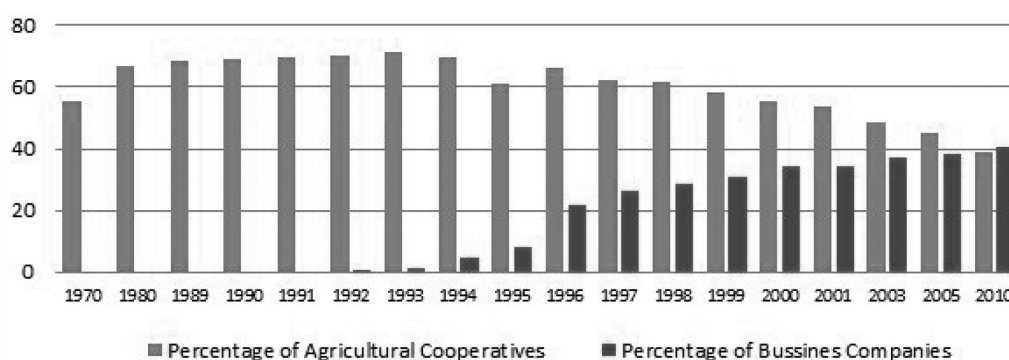
Over the last almost twenty years, agricultural cooperatives have gone through complex changes, both in terms of normative regulations and structural changes in the agricultural sector. The following Figure 3 shows the development trend of the number of agricultural cooperatives in Slovakia, as well as the development trend of the average area of agricultural land that they farmed in 1970 – 2010.



**Figure 3:** Development of agricultural cooperatives

Source: Green Report, MARD SR, 1996 – 2010; Structural Census of Farms 2010; Statistical Yearbook 1970 – 2010; processing: SUA in Nitra, Department of Law

According to Figure 3, the average area of agricultural land has declined over the period approximately the same as declined the number of agricultural cooperatives in Slovakia. After 1994 (Figure 4), the share of trading companies farming on agricultural land started to increase and in 2010 it slightly exceeded the share of agricultural cooperatives.



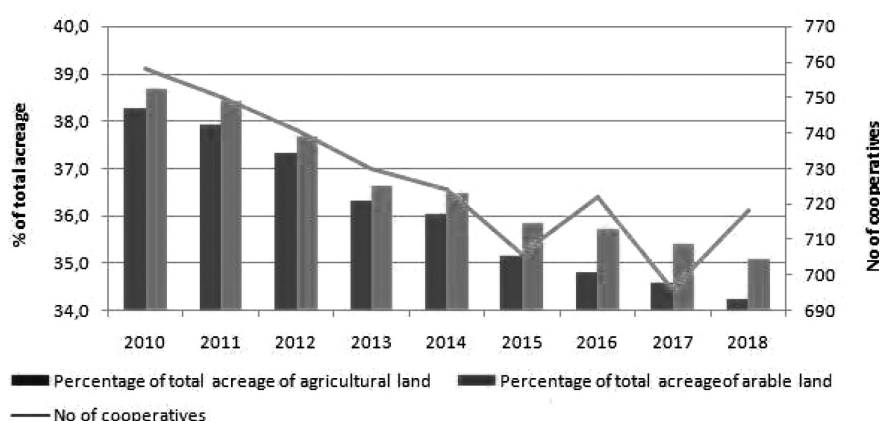
**Figure 4:** Percentage of cooperatives on land

Source: Green Report, MARD SR, 1993 – 2018; Structural Census of Farms 2010; processing: SUA in Nitra, Department of Law

The current legal regulation of the cooperative is characterised by openness. New members can join the cooperative and current members can leave without having to change the basic document – cooperative statutes and Business Register entries. The openness of the cooperative is governed by the legal regulation of the capital, which is the sum of all member deposits, but only a part of the so-called registered capital is recorded in the Business Register, which must be at least EUR 1,250. A cooperative must have a minimum membership base both at its establishment and throughout its existence representing by either five natural persons or two legal entities. Establishing a cooperative is easier and is not as formalized as establishing a trading company. A cooperative as a legal entity arises on the date of its entry in the Business Register provided that half of the registered capital is paid. The legal regulation of the cooperative establishes the cooperative as a share cooperative, where the member's share expresses the participation rate of a member in the cooperative, the amount of which is determined according to the ratio of the member's deposit to the registered capital, unless the statutes of the cooperative regulate its amount otherwise. A member of a cooperative may be a natural or legal person. The formation of membership, its duration and its extinction are governed by the voluntary principle. Membership may be modified in the statutes as a membership with employment relation-

ship. The Commercial Code allows applying on cooperative the general provisions on trading companies appropriately if there is no special regulation for the cooperative.

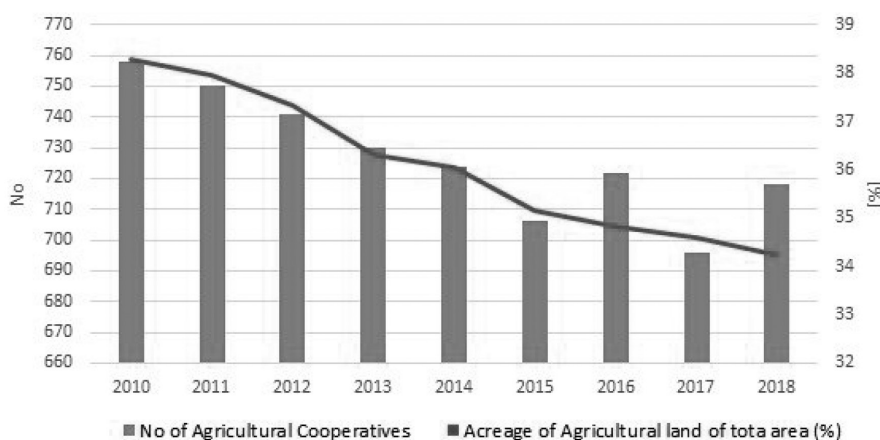
By enshrining the legal form of the cooperative, the current legal regulation extends the range of business entities and offers to those interested in business a wider choice of forms of legal entities. The advantage of a cooperative form of business is highlighted by its flexibility. Furthermore, it is the anonymity of members not enrolled in the business register. The cooperative conducts only a non-public list of its members. In comparison with a similar regulation of a business company, the regulation of a cooperative is simpler and more liberal, given the dozens of dispositive provisions concerning the statutes of the cooperative. The statutes of the cooperative, as the basic document approved by the members of the cooperative during its establishment, deal with the fundamental issues of the internal organization of the cooperative, the mutual relations between the cooperative and its members, the mutual rights and obligations of the members towards the cooperative, the legal status of the cooperative towards third parties.



**Figure 5:** Development of cooperative form of business in Slovakia in 2010 – 2018

Source: The selection from the report OSEV 3-01, legal form 205 (cooperative)

Figure 5 illustrates the current state of development of agricultural cooperatives as well as the percentage of agricultural and, in particular, arable land for the period 2010 – 2018. In each of the years under review, there was a slight decrease in the number of cooperatives.



**Figure 6:** Percentage of cooperatives on agricultural land

Source: Research Institute of Agricultural and Food Economics

– based on a selection made from the report OSEV 3-01, legal form 205 (cooperative)



The decline in the number of cooperatives between 2010 and 2018 is also reflected in a decline of the share of the agricultural land on which they farm (Figure 6). In 2018, agricultural cooperatives farmed at 657,350 hectares representing 34.25% of total agricultural land in Slovakia.

#### 4. CONCLUSION

Based on the analysis of the development of the cooperative legislation, it can be stated that the cooperative as a special business entity has its place in the structure of business entities even under current market conditions. Unlike trading companies, a cooperative as a legal entity was established spontaneously during the history and in several countries almost simultaneously to deal with the economic situation of its members by mutual help and economic self-help of members. In the conditions of the Czechoslovak Republic, especially since 1949, the gradual acceptance of rigorous regulations to the cooperative as a legal entity operating mainly in the agricultural sector has weakened the core ideas of cooperative societies and a directive regulation has started to prevail. The current legislation has united all types of cooperatives. The regulation is uniform, regardless the cooperative's subject of activity, and represents therefore an appropriate form for carrying out business activities in any area, including agriculture.

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# KNOWLEDGE-BASED SUSTAINABLE DEVELOPMENT – CONTEMPORARY USE OF COMMUNIST-ERA URBAN DEVELOPMENTS IN THE CENTRES OF ROMANIAN CITIES

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**Abstract:** *Romania, as other neighbouring countries, has been under a socialist-communist regime since the end of the Second World War, until 1989. From King Michael I's forced abdication of 1947, until the Romanian revolution of 1989, the socialist-communist authorities have been laying their marks on the country, including some extensive urban developments in the centres of many Romanian cities. These developments were often carried out through a considerable amount of demolition works, thus replacing older buildings – and pre-communist built areas – with new ones. Consequently, many Romanian cities ended up losing elements of architectural heritage, memory and identity. Old mansions, churches or merchant houses usually had to leave the scene in order for a new architecture to emerge – one that would be mostly rooted in functionalism, brutalism and socialist modernism.*

*Today, at roughly 30 years since the fall of communism, some communist-era urban developments are beginning to “age”, as some of the buildings erected in that era began to require repair works and different means of upgrade, such as thermal insulation. This triggers some actions of architectural re-modeling of communist-era buildings, and even some urban remodeling of communist-era civic centres and urban ensembles. Looking at how these actions are being done, one of the most immediate remarks has to do with the fact that the original designs of the buildings and urban spaces are often modified, altering their “personality”. In other cases, communist-era urban developments that occupy portions of the city centres are beginning to decay, laying in a somewhat semi-abandoned state, probably not popular with city dwellers...while older parts of the central areas are bustling with city life. This phenomenon raises the problem of “sustainable development” regarding this family of urban areas, as they are often linked with bad memories of the communist past, triggering a mix of neglect and desire to modify (in looks, in form).*

*Following this setting, the paper tries to analyse the reasons behind this phenomenon, also searching for ways in which these (often unpopular) communist-era developments can be approached in order to properly use the central areas that they occupy, in a sustainable manner.*

*One of the key findings of the research has to do with issues of identity, as perceived by the public. Lack of attachment to communist-era urban developments from central areas is strongly linked to the destructions that made the new developments possible, in the beginning. In order to gain a higher degree of appreciation and interest from the public, these developments usually strive for “upgrade”, as a “rebirth” of personality. For example, many of the department stores have had their facades remodeled in recent years, and this visual “refresh” often brings more people to the stores. On the other hand, large mineral open spaces usually get “flooded” with vegetation in recent edilitary works – in order to (probably) make the former squares (initially designed for political rallies) a little more “humane”. It seems like the identity of communist-era spaces and buildings is not too valuable for the communities they should serve and represent...*

**Keywords:** *rehabilitation, revamp, conservation.*

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## 1. SUSTAINABILITY IN REGARD TO FUNCTIONALITY

One focus of the research would be on the technical side, in order to evaluate the targeted “heritage” in terms of adaptation to current technical needs. In this respect, the thermal rehabilitation is a relevant example, as communist-era buildings (mostly blocks of flats) adapt to this new technical goal. Quite often, other technical aspects of the buildings tend to be improved, such as piping, but the thermal insulation is usually more striking, as it changes the exterior appearance (i.e. the facades) of the buildings.

Otherwise, communist-era buildings can be considered quite “young”, at least in comparison with other “generations” of built heritage, such as the interwar-period modernism, the turn-of-the-century architecture, or the 19<sup>th</sup> century eclectic group. Inside the “communist family of built form” itself, some products are older and newer. In the area that constitutes the focus of this paper, namely communist-era buildings that are to be found in central areas of Romanian towns, one immediate observation can be stated: the newer buildings (1980s blocks of flats) and the more special ones (public buildings) usually tend to be preserved in their original form, with relatively few modifications, while older and more ordinary buildings (especially 1960s and 1970s blocks of flats) tend to be modified in a more consistent and noticeable way.

As most 1960s and 1970s blocks of flats had been constructed as forms of social housing, using arguably poor materials (such as prefabricated concrete panels for facades), the trend is to upgrade such facades. This is usually done as thermal rehabilitation. On the other hand, the newer generations of blocks of flats, usually constructed after the 1977 earthquake with subsequent improved structural resistance and better construction materials (such as light cellular concrete bricks in the compositions of the walls), have been usually needing less renovation. As the exterior walls and the facades had usually been constructed using the cellular concrete bricks, these blocks of flats are performing better in terms of thermal insulation, compared to the ones that used thin prefabricated concrete panels. That is one of the leading reasons for which 1980s blocks of flats have usually preserved their original facades, while the 1960s and 1970s blocks have usually been rehabilitated and thus modified.

The 1950s generation is a little bit more interesting, as the 1950s blocks of flats usually look “sturdier” than the 1960s and 1970s ones - with a more robust appearance, overall - compared to the “thin” look of the prefabricated facade panels that came to be largely used in the 1960s and 1970s. The 1950s are the years of the aesthetics of the “socialist realism” (sometimes written with capital letters or labelled as “Stalinism”), when blocks of flats were usually conceived as “palaces for the working class”, wanting to offer quality and prestige to the working class, as to compensate for the frustration of the proletariat’s former condition as people who could not afford quality housing. [1]. Following the popular slogan of “giving columns to the working class”, the 1950s blocks of flats usually employed some decoration in the form columns and pilasters. Because of all these reasons, 1950s blocks of flats and ensembles are often preserved in their original form, quite rarely being affected by the “polystyrene frenzy” (from a rough statistical viewpoint). Decoration may be an important reason for this, as communist-era blocks of flats are, retrospectively, largely devoid of decoration. After the fall of communism and because of the subsequent restauration of the basic freedom of speech, most communist-era apartment buildings have begun to be often described as mere “matchboxes”. Consequently, the blocks of flats that do retain some decoration may be seen as something valuable, lowering the chance of them being “polystyrenised”, although being quite old...

The aforementioned tendency to preserve communist-era decoration on buildings (when it is the case) can also be noticed when talking about the contemporary uses of many “special” public buildings from the era, such as administrative centers (town halls) or cultural centers (the “houses of culture”, as they were called). Being usually decorated and having more complex designs in terms of volumes, it can be speculated that these buildings have been less prone to post-communist rehabilitation, because of a few reasons. Hotels and department stores have usually had a somewhat different fate. As private-owned businesses that had to modernise in order to survive and thrive on the free market in post-communist times, they were prone to more frequent rehabilitation works than state-owned public buildings.

The ecological aspect of sustainability is another issue. Regarding this, it can be argued that some large public buildings from the time of communism are hardly sustainable because of relatively high operating costs (heating, air conditioning, etc.) and relatively high carbon footprints, even if their functionality is not considerably affected. Again, sustainability is a complex concept, so the task of evaluating a building’s overall performance in sustainability is also complex.

## **2. SUSTAINABILITY IN REGARD TO SEISMIC RISK**

Regarding this paper’s target group of architectural and urban heritage, another important aspect of sustainability would be earthquake risk. Bucharest, for example, is one of Europe’s most dangerous cities in terms of destruction related to earthquake risk, as massive earthquakes (around 7 on the Richter scale) usually occur once in a couple of decades. The usual epicenter of these earthquakes is in the Vrancea region, approx. 150 km from Bucharest, to the North-East. The last disastrous Vrancea-type earthquake happened in 1977, its magnitude being measured to 7.2 on the Richter scale. It claimed the lives of approx. 1.500 people and it injured around 11.000 others, circa 90% of the casualties being in Bucharest. Some dozens of buildings collapsed in the capital city. Before this, another massive earthquake was recorded in 1940. It was measured to 7.4 Richter [2].

Consequently, an important quantity of buildings is in danger of collapsing at the next big earthquake. Communist-era buildings from the central areas are no exception to this. The most vulnerable group from the socialist-communist heritage is that of high-rise (and sometimes medium-rise) apartment blocks that were built in the early years of socialist-communist rule, before the 1977 earthquake, so roughly between 1947 and 1977. Following the disaster of 1977, seismic design of buildings substantially evolved, but seismic considerations were relatively scarce before 1977, although not completely absent.

This is one of the reasons for which this particular group of buildings is facing considerable sustainability issues, as the risk of collapse affects it in many ways. For example, the “Gioconda” high-rise apartment block in Bucharest has become mostly unsustainable for renovation works and upkeeping. While other neighbouring apartment blocks - that pose a lower collapse risk - have been thermally rehabilitated and upgraded, the Gioconda tower is almost virtually “frozen in time” from when it was built, in the year 1959 [3]. The load-bearing structure of reinforced concrete has been consolidated only partially, as a complex system of causes and reasons have hindered the building’s security agenda. One of these drawbacks is the difficulty of sustaining the potential cost of a structural consolidation, as state contribution to the expenses is usually hard to obtain due to complicated and slow bureaucracy, widespread corruption and even lack of concern towards the matter. As the “Gioconda” is technically a condominium, with every

flat being owned by a private entity (usually residents), plus a few shops at ground level, a potential consolidation cannot be theoretically done if some of the owners refuse to contribute to the expenses. As some of the owners prefer not to invest money in the building's consolidation, the work cannot be done. Some of the residents are often caught in the situation of wanting to contribute, but not having the funds that are required, due to relatively low income. Because of this, public funding or sponsorships are usually sought after, but, as they rarely materialise, the owners of the flats prefer to stick to their properties, accepting the threat in case of a devastating earthquake.

Another potential solution to the problem theoretically exists, but its chances of success have also proven to be quite low. It's the practice of state-funded compensation for a private property that needs to be demolished because of various reasons. In this situation, the high risk of collapse can be easily considered as a risk to public safety, thus the structure can be designated to be demolished. In order for this to happen though, each private owner has to accept the offered compensation, and this is usually in the form of money or another flat in a new building, usually at the outskirts of the city. As the Gioconda block is in the core of Bucharest's city center, some owners refuse to move or accept the money from the state, as they don't consider the compensation to be fair, or to suit their needs and interests. In this situation, it is usually quite hard for the authorities to force the owners into accepting the compensations, if they refuse to...and this is due to the specific features of Romanian property law and urban development law, alongside the quite difficult and slow bureaucracy, plus the relatively low performance and amplitude of state-induced urban development.

For all these reasons, the "Gioconda" tower block has become a low-quality and low-income condominium. Many of the former residents have rented their apartments and moved into a probably safer flat/house. Some "original" residents, living in the tower block since it was built in 1959, have aged and have probably found it hard to move away. Because of its seismic risk, the Gioconda's flats are cheaper to sell/rent than similar flats in nearby blocks that have a lower seismic risk. This theoretically attracts more low-income owners and tenants to the Gioconda, making it quite unsustainable to afford proper structural rehabilitation. The facade has not been rehabilitated, some original pieces of cladding materials have fallen, and the building is in a quite bad shape, overall.

Another clue to its difficult situation is the frequent use of huge advertising meshes on the facade. These meshes are blocking window views from the flats to the outside, but the owners of the flats receive money for accepting advertising on their part of the facade. It is interesting to realise that the residents choose to renounce a considerable amount of daylight and urban view in order to receive some money from advertisers. Arguably, this phenomenon is more unlikely to happen on the facades of higher-income apartment buildings, but it's affecting a considerable amount of city-center apartment buildings similar to the Gioconda, where seismic risk is taking its toll on the quality of life of the residents, through the downfall of the prices of property. On the other hand, an aspect that cannot be overlooked is the fact that the tower block has adapted, and that it is now providing more accessible prices for apartments in the heart of Bucharest's city center...Some of the spaces are momentarily being used by some homeless people. The relatively bad shape of the facades may be considered to have attracted a few manifestations of street art, as some murals (plus some graffiti) have made their way onto the surfaces of the building. How sustainable is the Gioconda block actually? Yet again, the sustainability issue presents itself as a relative, debatable and problematic aspect.

### 3. SUSTAINABILITY IN REGARD TO PERCEIVED CULTURAL VALUES AND IDENTITY

Technical aspects such as functionality, carbon footprint or seismic risk may be some of the first ones to be considered when trying to explain and evaluate a certain building's sustainability performance. Apart from the more technical side, there is also an undeniable cultural side of sustainability, as well. The cultural perception of a building can play an important role in its sustainability, and this can happen in many ways. For example, the cultural attachment of certain groups of people to certain buildings tends to work in favour of those buildings' conservation and upkeep, and this can be considered as a form of (cultural) sustainability. On the other hand, buildings and spaces that are not so culturally relevant for a specific community, and have not triggered consistent attachment from the part of the citizens, are more prone to changes and alterations to their integrity. As in heritage protection law and practice, higher cultural values attract higher degrees of required conservation of those values, while lower cultural values leave more space for changes to the original, existing forms. Different categories of (cultural) values can be either the product of professional evaluation, as it happens with listed monuments and sites, or they can be the product of the unqualified perception of regular citizens and groups – and this can be observed in the way that groups of citizens relate to their built environment in terms of preservation of the original designs.

Therefore, cultural insight can also prove to be a useful tool in understanding the ways in which urban developments from the socialist-communist period are being used and edited today. For example, the building of the National Theatre of Craiova (a communist-era building that was designed and erected between 1969 and 1974) [4] is often perceived as a cultural value, having succeeded in earning an unusual status of “unofficial monument” in its “community” (the people of Craiova, here considered as a “collectivity”, from a sociological/anthropological point of view). Relatively new buildings and communist-era ones are rarely perceived as cultural values, and they are very rarely listed as protected heritage inside the Romanian law - thus turning the National Theatre building of Craiova into a special case.

Although it is not listed as heritage, so not technically a “monument”, the theatre building is often labelled as such by various citizens of Craiova and beyond, including some leading architects and intellectuals. The generally perceived - and often stated - architectural/cultural value of the building makes it an icon and (arguably) a symbol of the city, although Romanian law does not (yet) recognize it as such.

In return, this acclaimed cultural value of the Craiova theatre building may be considered as one of the reasons for which it has not been altered (in its original architectural design) following the fall of communism. The value of this particular theatre building largely rests on its perceived architectural qualities, mostly due to its special composition of volumes. This sets the Craiova theatre building apart from usual communist-era buildings – often labelled as dull, austere, common, severe, stern, etc. Therefore, in this chain of explanations, one can notice a “red wire” travelling between good architectural design, perceived cultural value, identity, conservation, and sustainability.





**Figure 1:** “Unirea” Universal Store, Bucharest: the first wing of the store, built 1976. It was to be later extended, with 2 adjoining wings, during the 1980s.



**Figure 2:** former “Unirea” Universal Store (Bucharest) in its current form, renamed “Unirea Shopping Center”. The new facade is covering the original one. There have been several changes in the appearance of the facade since the end of the socialist-communist era.



**Figure 3:** “Cocor” Universal Store, Bucharest, in its original form (built in the 1970s).



**Figure 4:** the “Cocor” store (Bucharest) in its current form, rebranded as luxury store and displaying multimedia facade. The picture is taken from the same approximate angle as the communist-era one.





**Figure 5:** “Mercur” Universal Store, Craiova, in its original appearance, from the 1980s.



**Figure 6:** the new “Mercur” store (Craiova), consistently revamped (in 2015), renamed “Mercur Center”, and transformed into a mall (by today’s standards). The facade is strikingly modern, and has been largely acclaimed by the public.





**Figure 7:** “Jiul” Hotel, Craiova, in its original form (built in the 1970s).

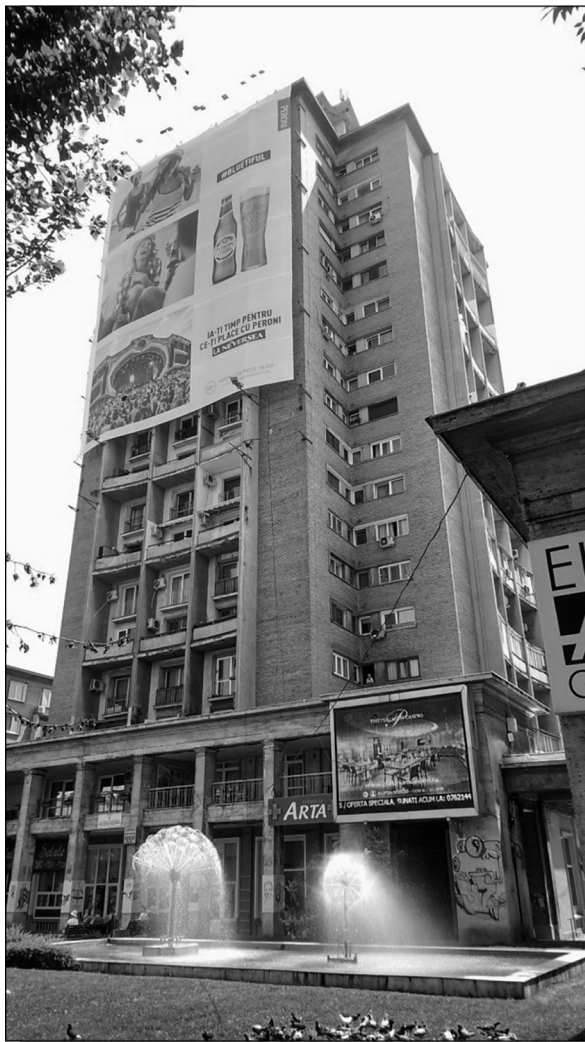


**Figure 8:** “Jiul” Hotel (Craiova) as today’s “Ramada Plaza”. The “Ramada” international hotel chain has recently bought the “Jiul”, revamping it with a couple of contemporary features, such as a new facade.





**Figure 9, 10, 11:** The National Theatre building, Craiova, erected 1969-1974 and displaying an unaltered, original facade. The area is very popular with the citizens of Craiova.



**Figure 12, 13:** “Gioconda” tower block, Bucharest, in 2 recent photos, showing very few marks of post-communist interventions. Built in 1959 as one of the highest apartment blocks in Bucharest up to that date, the building faces a high risk of collapse in case of a powerful earthquake. This is one of the reasons for which it has become a low-income block of flats, with apartment prices and rents being relatively low. Aside from a partial reinforcement of its load-bearing structure, the building has not been renovated/rehabilitated/revamped, as its seismic risk is jeopardising such potential investments, from a financial point of view. Some of the original windows and frames have been replaced by newer, more efficient ones. There are numerous cracks that can be seen on the facades. Some of the surfaces are cladded with travertine stone (an expensive material), but are badly upkept. Some surfaces are covered with graffiti. The advertising mesh is hindering the access of natural light inside the rooms that are behind it.

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- [13] Figure 9, 10: personal archive.
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# ACCESSIBILITY AND FACILITY OF THE DISABLED: THE CONSORZIO DI BONIFICA MONTANA DEL GARGANO AND PARCO NAZIONALE DEL GARGANO CASE STUDIES

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**Abstract:** *Numerous cases of protected areas have used a range of measures to provide autonomous access to visitors with special needs during their visits. This paper aims to illustrate the interventions at the Parco Nazionale del Gargano (Gargano National Park) and the Consorzio per la Bonifica Montana del Gargano (Consortium of Reclamation Gargano) to make accessible visits possible for people with special needs.*

**Keywords:** *accessibility, disability, natural protected area.*

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## 1. INTRODUCTION

Naturalistic tourism, understood as guided tours within protected natural areas, is an important factor in the economic development of a protected natural area.

A document of the International Union for Conservation of Nature (IUCN) has defined protected areas as “a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” [1, 2].

It follows, therefore, the need for access to facilities and services for all people who have special needs, that is, those with physical and/or cognitive disabilities, without encountering any difficulties regarding their autonomy while ensuring their safety, comfort and ability to eat any food (for example, people with celiac disease, allergies etc.) [3].

Laws and technical standards have been established to delineate the requirements and actions necessary to ensure the accessibility of a public place. The United Nations has published various documents: the Universal Declaration of Human Rights of 1948 [4], the Declaration on the Rights of Mentally Retarded Persons of 1971 [5], the Declaration on the Rights of Disabled Persons of 1975 [6], the Declaration on the Rights of Deaf-Blind Persons of 1979 [7], the Resolution 37/52 of 1982 called the World Program of Action Concerning Disabled Persons [8], the Standard Rules on the Equalization of Opportunities for Persons with Disabilities of 1994 [9], and the Global Disability Action Plan 2014-2021 [10].

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The European Union has issued numerous documents, among the most important being the one released on 26 November 1993 on the accessibility of transport [11] and the resolution published on 20 December 1996 on equal opportunities for disabled people in all fields [12], including leisure time. Even Italy has very detailed regulations on accessibility and social inclusion, both at the state level and at the level of the individual regions [13].

Following these rules, several Italian parks have adopted guidelines to make their areas accessible and offer all the services that people with disabilities need.

## **2. BEST PRACTICES ADOPTED IN ITALIAN PARKS**

The accessibility of a protected area is measured by the degree of accessibility of places and structures connected to it; that usability should also be seen as a possibility for people with special needs to access a structure or open space to fully enjoy services and activities connected to it or related to it [14, 15].

Italy has 24 national parks, and some of them have adopted practices to facilitate access to people with disabilities [16, 17].

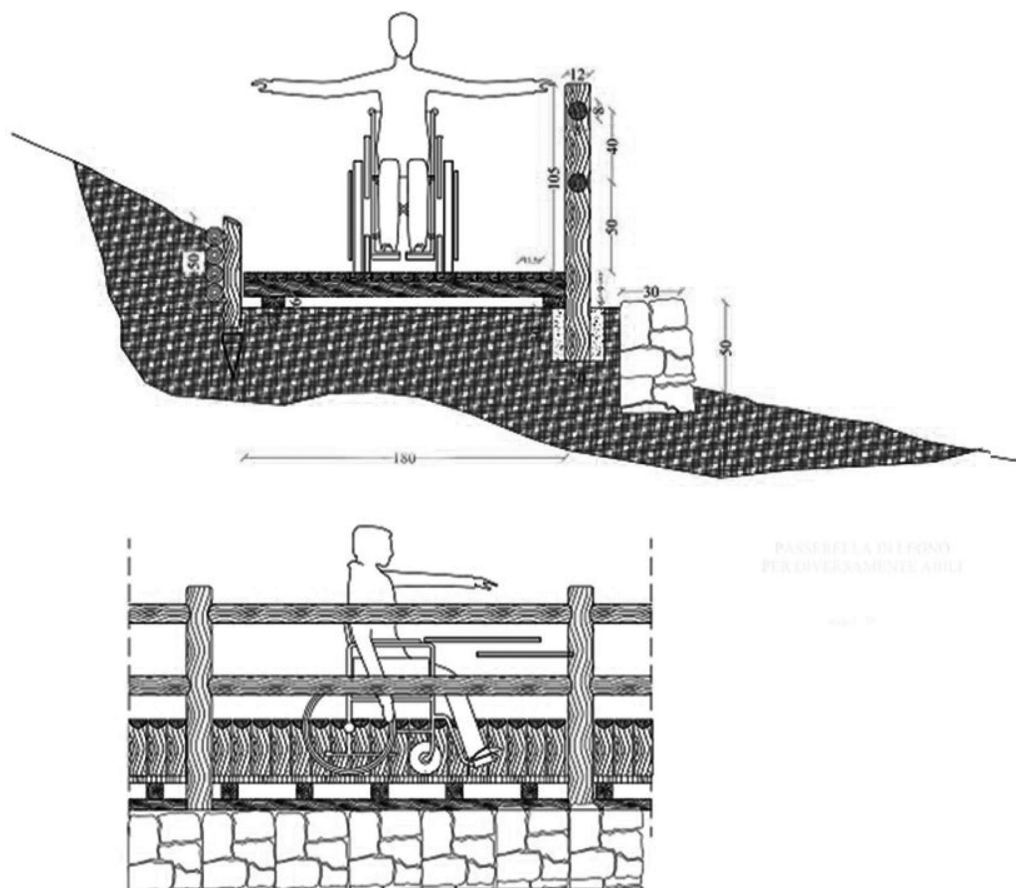
- The La Maddalena Archipelago National Park has installed parking spaces for people with disabilities and walkways to allow access to some beaches [18].
- The Cinque Terre National Park has an underwater course for those with disabilities [19].
- In the Circeo National Park, a walkway was built for people with mobility difficulties. [20].
- The Dolomiti Bellunesi Park proposed, in collaboration with the Italian Association of People with Down Syndrome, a program of guided excursions and environmental interpretation laboratories in areas of the park that are accessible to those with disabilities. Some examples of various activities are workshops on flower scents, tactile recognition of natural objects for blind people, recognition of the sounds of the forest and of the sounds of animals etc. The Park has built accessible parking areas and organizes events to promote participation in naturalistic excursions for people with disabilities (e.g., blind people, those with reduced mobility or other difficulties) [21].
- The Gran Paradiso National Park has made some facilities accessible, such as visitor centers, accessible trails, hotels, shelters, and chalets [22].
- The Gran Sasso and Monti della Laga National Park lend a special wheelchair free of charge with the help of two people, to walk paths and mule tracks [23].
- In the National Park of the Sibillini Mountains, there is a path that can be walked with wheels strollers, and chairs [24].
- The Sila Park uses a special wheelchair to walk the paths and distributes information brochures in braille to blind visitors. In a visitor center of the above park, paths in the botanical garden have been made accessible both for blind people, thanks to the presence of audio file panels explaining the various essences present, and for people with walking difficulties. In another visitor center of the above park, there is a path dedicated to people with motor disabilities. Another path, equipped with tactile signaling systems for ground orientation and handrails, was created for those with visually impairment or blindness [25].

### 3. THE CONSORZIO DI BONIFICA MONTANA DEL GARGANO AND PARCO NAZIONALE DEL GARGANO CASE STUDIES

In this context, the Consorzio di Bonifica Montana del Gargano (Land Reclamation Consortium of the Gargano) [26] and the Parco Nazionale del Gargano (Gargano National Park) have implemented good practices [27] because these institutions have almost coincidental territorial competence. The objective of these two institutions, in the last decade, has been to provide accessibility in a mountain area that cannot be accessible to all visitors. In particular, within the Gargano National Park, some of the most significant protected areas have been made accessible to people with reduced mobility.

#### 3.1. Consorzio di Bonifica Montana del Gargano

In this case, some interventions sufficiently made the areas of the Gargano Reclamation Consortium accessible to the public. Between 2012 and 2013, 1,092 meters of wooden walkway were completed, complete with signage, a fence (1,577 meters) with parapet function, footboard, and, in some cases, specific tables (two complete tables of benches) for those with motor disabilities. From a technical point of view, the gangway was characterized by the following specifications: wooden walkway, treated in an autoclave, with a width of 1.80 m, consisting of two longitudinal beams of a minimum length of 3.00 m and section of 6 x 12.5 cm; 3 square murals, made from wooden boards treated in autoclave, comprising a section of 9 x 9 cm and length of 0.80 m; and complete with anti-slip knurling with a minimum length of 1.50 m and section of 11.5 x 4.5 cm, as shown in figure 1.



**Figure 1:** Technical drawing of the wooden walkway



The interventions, walkway, and tables with specific benches are indicated in figures 2, 3, 4, 5, 6 and 7 in detail.

Furthermore, the Consortium has eliminated all the architectural barriers of the Educational Forest's Nursery of Forest Biodiversity of the Gargano by creating an access ramp and a specific bathroom for individuals with disabilities.



**Figure 2:**

“Cross of the III millennium”, Municipality of Apricena

**Figure 3:**

Walkway and recreation area  
“La Madonnina”, Municipality of Cagnano Varano.



**Figure 4:** Walkway and tables with specific benches in the “Bosco d’Incerto”,  
Municipality of San Giovanni Rotondo



**Figure 5:** Walkway and tables with specific benches in “Difesa San Matteo” forest,  
Municipality of San Marco in Lamis





**Figure 6:** Walkway in “Spinapulci” forest,  
Municipality of San Nicandro Garganico



**Figure 7:** Walkway in “Manatecco” forest,  
Municipality of Peschici

From a financial point of view, the intervention is summarized in the following table:

**Table 1:** Walkways for people with disabilities

Financing source: OP Funds ERDF 2007/2013 - Axis 4 - Line of action 4.4 - Action 4.4.1 - Activity B - Adoption of public notice for the selection of projects concerning the first “Interventions on the network of paths in order to promote development of hiking trails”.

	Municipality	Length (m)	Walkway (€)	Fence (€)	Tables (€)	Total costs (€)
1	Apricena	266	55,159	18,612		73,771
2	Cagnano Varano	85	16,662	11,220		27,882
3	Peschici	200	39,120	26,400		65,520
4	San Giovanni Rotondo	200	39,120	13,200	759	53,079
5	San Marco in Lamis	115	24,450	8,250	759	33,459
6	San Nicandro Garganico	200	39,120	26,400		65,520
<b>Total</b>		<b>1,066</b>	<b>213,631</b>	<b>104,082</b>	<b>1,519</b>	<b>319,232</b>

### 3.2. Parco Nazionale del Gargano

Between 2015 and 2018, about 1000 meters of paths (500 meters for two paths each) for the visually impaired were completed, complete with signs with Braille characters, handrails with a guide and parapet function (1,577 meters), pile drivers, and two specific tables for people with motor disabilities complete with benches. From a technical point of view, the route is characterized by the following specifications: a path using an ecological stabilizing material type, “Terra solida”™, integrated, when necessary, with wooden walkways with a width of 1.50-1.80 meters; complete with a pile driver and tactile pavement, fence or cord, or jute strap; and equipped with tactile signals. The paths have braille signs and tables with specific benches for those with disabilities. A printed *Guide to the Park* was written using the international braille blind writing system.

In detail, the interventions are indicated below and accompanied by photographic documentation:



**Figure 8:** Access ramps in “San Domino” (Tremiti Islands)

1) Adjustment path for disabled in “Cutino di Umbra” and “San Domino” (Tremi Islands)

**Table 2:** Economic framework for “Cutino di Umbra” and “San Domino” (Tremi Islands)

	Cutino di Umbra	San Domino
A1) Cost of work	110,230	63,770
A2) Safety charges (2,97% of A1)	3,374	1,275
A Direct costs	113,604	65,045
B) Amounts available to the Administration		
B1) Overheads (2% of A)	2,272	738
B2) Communication tools	8,800	0
B3) Equipment Joelette wheelchair park	4,800	0
B4) Unexpected expenses	3,046	2,605
B5) VAT 4% of A2 + B2 + B3	5,089	2,250
<b>Overall amount of the intervention</b>	<b>137,611</b>	<b>79,393</b>



**Figure 9:** Adaptation path for people with disabilities “Cutino di Umbra”

- 2) The following are details of the adaptation work on making the beach accessible for people with disabilities in “Isola di Varano” (a work in progress):
  - Cost of work: €100,746 + €4,029 (VAT)
  - Fund financing: Budget of the Park Authority
  - Length: 230 meters of stabilized path + 64 meters of wooden walkway
- 3) Park guide for blind people
  - A paper guide on the value of the Park was created using the international braille blind writing system.
- 4) Underwater for blind people
  - Within the framework of facilitating accessibility for people with disabilities in the protected sea area of the Tremi Islands, various initiatives have been implemented:
  - 2012 Diving course to guide blind people employ four diving instructors/guides (Funds: €4,000 - Park Authority of the Tremi Islands Protected Sea Area management);
  - 2013 Diving course aimed at facilitating underwater use for four visually impaired visitors (Funds: €3,120 - Park Authority of the Tremi Islands Protected Sea Area management);
  - 2016 Diving course, with a guide, for blind people employ four diving instructors/guides (Funds: €3,500 - Ecosee project funded by the European Commission Directorate for Maritime Affairs and Fisheries, as part of the initiatives of the Guardians of the Sea program MARE/2013/09).

In the light of the interventions described so far, we can provide some useful considerations for classifying the type of actions carried out in favor of people with special needs and their accounting effects on the balance sheet of the Parco Nazionale del Gargano (Gargano National Park).

The first type of intervention concerns the development of instrumental equipment available to the national park's management and municipalities included in the protected natural area. In the years examined, investments were made for a total amount of about € 641,000.

Considering the total cost and the length of the pathways resulting from the interventions, the average cost per meter is about €200-300, but it depends on the materials adopted for paving walkways and on possible additional infrastructural interventions needed to make pathways accessible for people with special needs.

From the experiences described, these are interventions aimed at creating dedicated paths with equipment that increases the value of the real estate assets of the park. These are public goods that usually become part of the so-called "unavailable assets" and must be specifically recorded for accounting purposes when updating the inventory.

It should be noted that these assets are subject to a depreciation accounting procedure, in the sense that the total cost incurred must be split (usually on a straight-line basis) between several financial years, for a medium to long period of time (usually 20 years). In this way, the park that acquires the assets registers in the income statement, a (non-monetary) cost called depreciation charge, which takes into account, among other things, the physical wear and tear to which the asset is subject in the years of use. It should be emphasized that the depreciation charges have a negative impact on the "surplus/deficit of the period"; therefore, the company's own resources (net assets/equity) decrease. However, because the investments in question were also made with third-party funds (EU loans), at the accounting level, the depreciation rates only negatively affect the part of the investments that were not financed by third-party funds. Capital grants received to make investments are proportionately considered in the income statement among revenues to "neutralize" the corresponding depreciation charges.

The second type of intervention does not determine an increase in the park's assets, as it translates into sustained current expenses aimed at improving the quality of services dedicated to people with special needs. In this regard, the experiences described relate to the creation of guides/pamphlets and special training courses that are integrated with the previous interventions, in the sense that they favor a better use of the same interventions or can stimulate the arrival of new visitors in the area interested by the interventions. The total sustained expenditure related to this second type of intervention is much lower than the first type of initiative (about €15,000).

From an accounting point of view, this second type of expense determines the recording of annual operating costs in the income statement, which are covered by any contribution received on behalf of the period and/or by the park's own revenues.

#### 4. CONCLUSION

Sensitivity to people with disabilities has recently increased, and more attention is being paid to their problems. In response, many laws have been issued to improve the accessibility of public places and inclusion in social activities. Attention is also being paid to leisure time and,



consequently, to sustainable and accessible forms of tourism. Making a protected natural area accessible certainly contributes to the psychophysical well-being of people with special needs; therefore, greater attention and awareness on this issue are needed. However, it is necessary to guarantee full social inclusion of people with specific needs while taking into account respect for the natural environment and the principles of environmental protection.

Some parks have implemented best practices with encouraging results, considering the increase in visitors with disabilities, their caretakers, and their families. Furthermore, the increase in the accessibility of spaces and structures offers an opportunity for a more significant and incisive sensory experience, even for the able-bodied.

This paper examined the case studies of the Consorzio di Bonifica Montana del Gargano (Land Reclamation Consortium of the Gargano) and the Parco Nazionale del Gargano (Gargano National Park). It found that the implemented interventions have made many areas accessible and have allowed a significant number of people with disabilities to access the park, both those with motor disabilities and those with sensory disabilities. Compared to modest economic investments, the increasing number of disabled visitors encourages the continuation of existing activities and other initiatives. One of these is the adhesion to the Interreg E-Parks project, which is currently underway. It calls for further interventions to improve accessibility in the Parco Nazionale del Gargano.

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# EFFICACY OF MICRONIZED CALCIUM CARBONATE AS COADJUVANT IN EXTRACTION PROCESSES

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**Abstract:** *The use of appropriate processing aids at the correct rates tends to improve oil extraction efficiency in a cost-effective way without adversely affecting the oil quality. The aim of this research was to evaluate the effect of calcium carbonate added at the beginning of the malaxation phase, on both the extraction yield and the quality. The assays were performed with olive oil obtained from Kallinjoti olives at different ripening index. The use as a technological coadjuvant of calcium carbonate, E170 food additive, caused an increase of olive oil extraction yield. Moreover, an increase of pungent perception was observed in some cases when we added calcium carbonate to more ripened olives. Also, micronized carbonate allows a low mixing temperature to be used in extraction yields, resulting in higher quality olive oil. Concerning analytical determinations of oils (acidity, pH, peroxide values, ultraviolet spectrophotometric analysis  $K_{232}$  and  $K_{270}$ ), no significant differences were found when comparing oils obtained with or without carbonate and all of them could be classified as “extra virgin olive oil” according to European norms.*

**Keywords:** *Virgin olive oil, coadjuvant, calcium carbonate, extraction yield, oil quality.*

## 1. INTRODUCTION

Olive oil is a very important product due to its nutritional value, sensory and antioxidant properties. Olive oil has been claimed to be a healthy food whose consumption is associated, for example, to a low mortality by cardiovascular disease [1]. The story of the origin of olive oil in Albania has no difference from its spreading path in the Mediterranean. Albania is a Mediterranean country where it is thought the olive tree has originated. The industrial process includes physical operations [2]. The process begins by washing and leaf removal, Milling or crushing, mixing of the olive paste (malaxation), Oil extraction from the paste by pressing, centrifugal decanters, selective filtration, or through combinations of the different methods. Paste malaxation has been extensively studied because of its influence on oil quality [3] - [5]; temperature and mixing time are the main factors. Among the different types of olive oils that may be produced, virgin olive oil is the most valuable one, as the extraction process preserves its beneficial features. Not all the oil present in the olives is released: some remains inside the unsheltered cells; some are left in the colloidal system of the olive paste (microgels) and some are bound in an emulsion with the vegetable water. The difficulty of freeing this “bound” oil lies mainly in the fact that the droplets of dispersed or emulsified oil are surrounded by a lipoprotein membrane (phospholipids and proteins) that keeps them in that state [6], [7]. To improve coalescence, the paste temperature of the olive paste can be increased, thus reducing viscosity, although oil quality may be reduced as a consequence of too high temperatures [3], [5]. How easy or difficult the olive oil extraction is, has been linked to olive variety and seasonal conditions such as the level of irrigation, time of

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harvesting, type and amount of fertilizer used, the amount of olives per tree or a high incidence of fruits affected by pests (for example, due to *Bractocera oleae*) or physiological diseases (for example, due to chilling injuries). However, the consistency of the cellulose wall of the olive mesocarp cells and consequently the pectin content, as well as a high level of humidity, seem to be the basis of the emulsions formed, making more difficult the olive oil to be separated [8].

To break down such emulsions, some technological coadjuvants have been successfully developed, e.g. cellular walls degrading enzymes [9] and micronized talc (hydrated magnesium silicate) [10].

Pulverised calcium carbonate, traditionally used as a flocculation coadjuvant (coalescence), acts as supporting material and adsorbent medium facilitating flocs agglomeration. It has crystalline structure (calcite) and negative electric charge and shows no chemical reaction with olive droplets (hydrophobic colloids) [11] - [15]. On the other hand, given the high density of calcium carbonate, 2.72 g/cm<sup>3</sup>, near three times that of olive oil, it is easily eliminated, along with olive pomace, by centrifugation. The novelty of this work relies on the use of calcium carbonate as a physical-acting technological coadjuvant for virgin olive oil extraction. Calcium carbonate is authorized by European Union regulations (Directive 2001/30/CE) and used worldwide as a human food additive (E170). The influence of calcium carbonate in both the extraction yield and the sensorial characteristic of olive oil are presented in this work.

## 2. RESULTS AND DISCUSSION

Olives (*Olea europaea* L.), “Kalinjoti” varieties, were collected in the northeast and southeast of Vlora city. These olives were collected directly from the tree in harvesting time of the 2018 season. Olive samples were placed in plastic crates and were used for extraction experiments within 24 h of picking. The olive oil extraction process was carried out according to the pilot system at 25-27°C in Center of Agricultural Technology Transfer (CATT) Vlora, Albania.

The productive process of extra virgin olive oil involves: olive crushing, aimed to tear the flesh cells and let the oil run out; olive paste malaxation to enable the merging of oil droplets into larger drops, until they form “pockets” that can be separated into a continuous liquid phase; olive oil separation from the other phases by pressure.

The titratable acidity, the peroxide index, the determination of UV spectrophotometric indices ( $K_{232}$ ,  $K_{270}$ ) were determined from the extracted oils according to the European Union standard methods [16], [17].

Free acidity, given as % of oleic acid, was determined by titration of a solution of oil dissolved in ethanol–ether (1:1) with ethanolic potash.

Peroxide index, expressed in milliequivalents of active oxygen per kilogram of oil (mEq O<sub>2</sub>/kg), was determined as follows: a mixture of oil and chloroform acetic acid was left to react with a solution of potassium iodide in darkness; the free iodine was then titrated with a sodium thiosulfate solution.

The UV absorbances were measured at two wavelengths (232 and 270 nm), using a 1% solution of oil in spectrophotometric grade cyclohexane and a path length of 1 cm. Several experiment

designs have been performed to study the efficacy of calcium carbonate as a technological co-adjuvant and the influence of the main operational variables on the virgin olive oil extraction process [18].

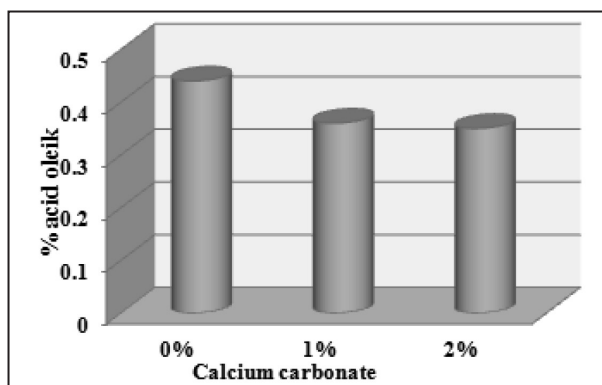
Results are summarized in Table 1. The results also show that the calcium carbonate gives a lower acidity, lower peroxide values and lower UV extinction coefficients ( $K_{270}$  and  $K_{232}$ ) than without calcium carbonate. Kalinjoti had lower acidity (0.36, 0.35); lower peroxide value (4.8 and 4.5); lower UV extinction coefficients ( $K_{270}$  and  $K_{232}$ ) (0.11 and 1.63) with calcium carbonate addition.

**Table 1:** Values of the parameters established to measure the level of quality of the virgin olive oil obtained

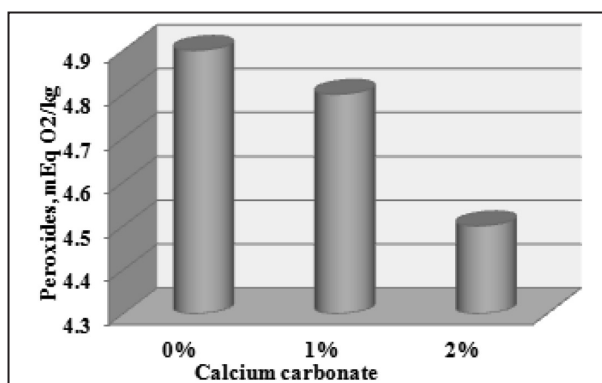
Variety	Carbonate added	Analytical determinations					
		Acidity (%)	pH	Peroxides, mEq O <sub>2</sub> /kg	$K_{232}$	$K_{270}$	$\Delta K$
Kalinjoti	0%(Control)	0.44	4.92	4.9	1.69	0.14	-0.003
	1%	0.36	5.1	4.8	1.65	0.11	-0.003
	2%	0.35	5.1	4.5	1.63	0.11	-0.001

The lower values of these quality parameters indicate that calcium carbonate gives better oil quality than without calcium carbonate used in this study. The quality of the oil was better for Kalinjoti cultivar. It is important to note that all the oil samples fulfill the quality requirements set for highest olive oil quality class: Extra Virgin Olive Oil. The olive oil quality ranking is set by the European Commission in the Regulation of (CE) No1989/2003.

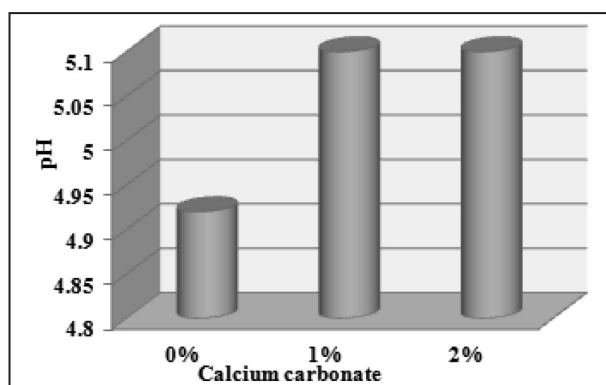
The graphical presentations of these quality parameters are in the following figures 1 – 5.



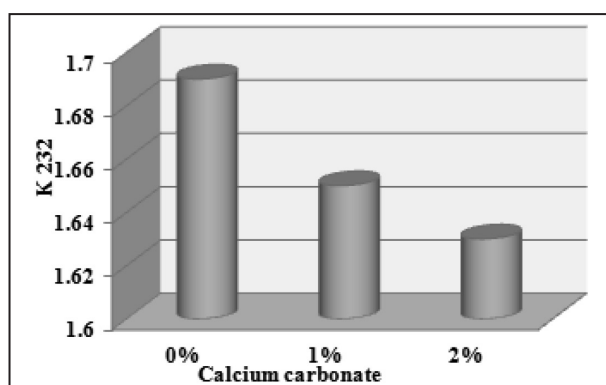
**Figure 1.** Degree of Acidity for Kalinjoti olive oil



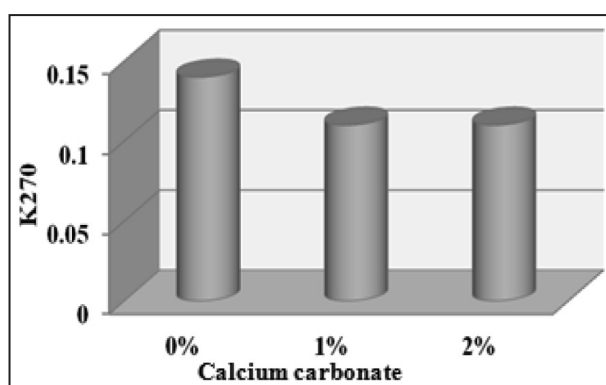
**Figure 2.** Peroxide value for Kalinjoti olive oil



**Figure 3.** The pH values for Kalinjoti olive oil



**Figure 4.** Extinction Coefficient  $K_{232}$



**Figure 5.** Extinction Coefficient  $K_{270}$

The use of calcium carbonate in extraction process is shown in table 2 and illustrated in figure 6. The calcium carbonate addition improves the oil yield in two cases. The calcium carbonate addition increased the oil yield for the Kalinjoti cultivar (19.9 kg oil/100 kg olives with 1% calcium carbonate addition and 21.05 kg oil/100kg olives with 2% calcium carbonate addition). Cultivar Kalinjoti that dominates on the Albanian orchards confirmed as a cultivar of interest for the production of olive oil.

**Table 2:** Oil extraction yield (kg oil /100 kg olives).

<i>Carbonate added</i>	<i>Kalinjoti Cultivar</i>
0%(Control)	19.5
1%	19.9
2%	21.05



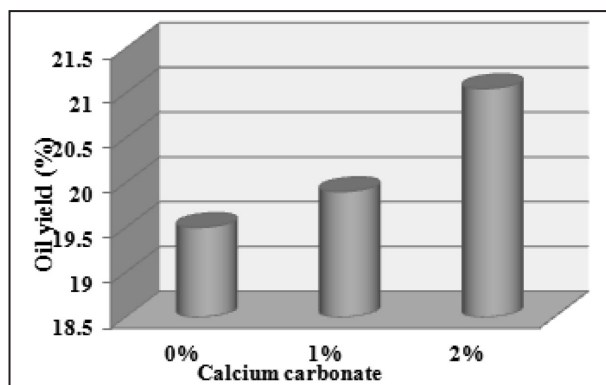


Figure 6. Oil yield (%) for Kalinjoti cultivar

### 3. CONCLUSION

The purpose of this study was to evaluate the effect of calcium carbonate on the extraction yield and quality of extra virgin olive oils from Albanian autochthonous “Kalinjoti” olives.

As a result of the work, it can be concluded that micronized calcium carbonate is an appropriate technological coadjuvant in the production of virgin olive oil. Moreover, due to its high specific area, carbonate use contributes in obtaining clean oils, with a low level of moisture and fine particles. According to these results, the recommended carbonate dosage is in the range 1-2% by weight referred to the weight of olive fruits, depending on the fruit variety, the moisture content and the maturity index of olive fruits. The results showed that the calcium carbonate improved the oil yield. On the other hand, the calcium carbonate addition provides higher quality oils.

The acidity, peroxide, UV extinction values were better with calcium carbonate. The quality of the olive oil can be classified as Extra Virgin Olive Oil according to the EU classification system for the olive oils. This indicates that the calcium carbonate offers benefits in olive oil manufacturing.

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# DIFFUSION INNOVATION

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**Abstract:** *Innovations, as a result of innovation and creativity, are characteristic of all areas of human activity. The concepts of innovation and innovation are primarily related to the economic sphere and business of business entities. Innovation must have practical application, to benefit as an innovator (material and moral satisfaction), as well as to recipients of these innovations. A particularly important area in the transfer of innovations is the legal protection of intellectual property - how innovators protect their ideas from unauthorized use or misuse of innovations.*

**Keywords:** *innovation, creativity, business entities, diffusion of innovation, protection of intellectual property.*

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## 1. INTRODUCTION

In the literature can be found many definitions of innovation, innovation, and the like terms. According to one definition, the innovations are the 'process whereby the idea of being transformed into a new / improved products, services or processes in order to improve its own, and differentiation of the competition on the market' [8]. There is also a wider and shorter the definition of innovation [10]. According to a broader definition, innovation is 'renewal and expansion of range of products, services and their market; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organization, working conditions and skills of the workforce'. According to another shorter and consistent definition, it is a 'transformation of ideas into new or improving technological processes or products; new organizational system or a new approach to the services'. According to Peter Drucker, innovation is 'a specific tool of entrepreneurs, the means by which they exploit change as an opportunity for different products and different services' [2, p. 101].

Innovations relating to all spheres of human activity and therefore can talk about social innovations, technical and technological innovation and business innovation. The Innovation in business, they can equally occur in the manufacturing or service industries, and - tourism, trade, banking, insurance and the like. The public innovation very often associated with entrepreneurship and highlights the temporal aspect: that innovation should appear at the right time and to be the first or second with innovation. As sources of innovation, Drucker lists seven factors are grouped into two groups - internal (from the point of undertaking) and external. The internal sources include: unexpected inconsistency, and the needs of the sudden change in the economic structure. As external sources said demographic trends and new scientific findings [4, p. 7-8].

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When it comes to the form of innovation, we can talk about a new product or service and new organizational process. Innovation can only apply to one or more companies in one country but also has a universal character. A particularly important element of any innovation is the convenience and the opportunity to be applicable in practice or in an economically justifiable ground.

A possible application of an innovation in economic fundamentals justified if not the most important, then certainly one of the most important preconditions for what is the theme of this work - the diffusion and dissemination of innovations. Without fulfilling this condition has no social or economic base for the sale and purchase of an innovation, no matter how much she represented novelty in its field.

## 2. ELEMENTS OF THE DIFFUSION INNOVATION PROCESS

The diffusion (spreading) innovation is considering a whole set of important issues that determine whether an innovation will remain in a narrow circle of its creator or to 'see the light of day' and allow the benefit of its application to a wide range of people. The most important issues in this area are as under what conditions and at what speed the spread of innovation, legal aspect - protection of intellectual property and the like. It is usually defined as a process of diffusion of innovations to a larger number of different users, with its use in certain variations, modifications, (depending on the specific requirements and needs of the recipients), including improvements in relation to the original innovation. Diffusion of innovation takes place in two main directions so we can talk about horizontal and vertical expansion. Horizontal diffusion means expansion in spatial terms - between certain geographic areas, regions and countries. The vertical diffusion means expansion in one industry, social services or scientific field.

### 2.1. Innovation as an intellectual property

Every innovation is the result of human activity and intellectual effort and as such must be the object of protection of the rights and interests of innovators. In practice, there are different forms and degrees of protection of these rights.

**Patent** [3, 2010] is „exclusive right recognized for an invention which is a product or process that provides a new way of doing something or offering a new technical solution to the problem. The exclusive right implies the right to prevent third parties from commercially exploiting a patented invention without the permission of the patent owner „(Intellectual Property Office of the Republic of Serbia, 2010, 2).

Patents and small patents are recognized in our country by the *Intellectual Property Office of the Republic of Serbia* [11]. This protection has a limited duration of time - usually 20 years, while for a small patent, this period is 10 years, counting from the date of filing the patent application. In addition to time, the patent has a territorial - geographical restriction and refers to the State in which that patent is recognized. The patent application and the recognized patent are made available to the public by publishing in the *Intellectual Property Bulletin of the Republic of Serbia*.

Except in its own country, the patent can be protected also abroad. This is a prerequisite for spreading innovation beyond the boundaries of its own country - that a business entity licenses its innovations, to develop other forms of business cooperation and to be present in foreign mar-

kets. *Innovators have three basic ways of protecting inventions abroad: (1) national, (2) regional (through the European Patent Organization) and (3) international.*

The patent is just one of the prerequisites for innovation to succeed in the market and it is not a guarantee that innovation will be commercialized to the expected extent.

**The stamp** [12] is a legally protected sign by which a legal and natural person identifies its products and services in the traffic with the aim of distinguishing them from similar or identical goods and services offered on the market by other legal and natural persons. Using the terminology of marketing, it can be said that the use of the trademark in the function of differentiating the specific manufacturer, service provider, their products and services in relation to the competition.

Individual, collective and quality guarantees should be distinguished. An individual trademark is a legal trademark used by the holder or the owner of the trademark. In the role of the holder of this type of trademark, a legal or natural person is registered, on whose behalf the trademark is registered at the Intellectual Property Office. Unlike him, the collective trademark can be used not only by trademark holders, but also by other persons authorized by the trademark holder. When more than one business entity uses a trademark under the control of a trademark holder to serve as a guarantee of quality, geographical origin, production method or other common features, then it is a quality mark.

The stamp lasts 10 years and after the expiration of that period, its validity can be extended also for the same period of time, and this unlimited number of times. Otherwise, the issue of trademarks is regulated by the special Law on Trademarks [6, 1041/2009 and 10/2013], as well as numerous international agreements.

**Industrial design** [12] in order to be protected must be: (1) new (if it is not known that the identical design existed before) and (2) has an individual character (in the event that the impression left to the informed user differs from of the overall impression left to that user by some other earlier industrial design).

It is defined as „a three-dimensional or two-dimensional appearance of the entire product, or its part, which is determined by its visual characteristics, special lines, colors, shape, texture and / or materials from which the product is made, or which it is decorated, and its combination ,’ [12].

An important feature of this kind of protection of intellectual property is that it must be suitable for industrial applications-that it can be manufactured in an industrial or craft manner. Otherwise, this is an „artistic” achievement that can be protected in a different way-through the protection of copyrights.[13]

There are many reasons why business entities decide to apply this form of protection for their innovations and products. The geographical indication has a significant role not only in promotional but also in overall activities, with the aim of suggesting to customers the quality of products (as a rule of high and highest quality), differentiation from the competition and market recognition [14].

**The topography of semiconductor products** [15] protects innovation in this field since mid-2013 by the Law on the Protection of Semiconductor Products. It is also a novelty in relation to the previous Law on the Protection of Semiconductor Vehicles. Considering that information



technology is one of the fastest growing activities with an extremely high number of innovations, the need has been shown to improve the existing legislation (which was in force until June 201) and to align it with international regulations in this field.

The topography of semiconductor components is in fact a three-dimensional layout of layers of conductive, insulating and semiconductor materials intended for the performance of a certain electronic function. Protection covers only a topography as a 3D layout of the above layers, and not a concept, process, system, or production technique.

**License:** Unlike a patent that defines the basic principles of functioning of one invention, the license implies supporting documentation (constructive, workshop, instructions ...) which is necessary for starting the production process. The license agreement regulates a number of issues such as the definition of the licensee and licensee, the subject of the license, the fee that the licensee must pay to the licensee (amount, payment dynamics, etc.), the period of validity of the license, the scope and content of the necessary supporting documentation. An important item in each license agreement is the prohibition that the licensee independently disposes of the received supporting documentation, and in particular its assignment to third parties without the approval of the licensee.

**Know-How** is probably the most complete way to transfer an innovation. It was created in the second half of the last century, first in the most developed industrial countries - the United States and England. This implies the transfer of expertise and experience on the technology and production process of a particular product [9].

In the literature, the difference between commercial and technical knowledge is transmitted. Technical know-how consists of production methods and procedures that make business secrets (standards, recipes, specifications) while commercial know-how make knowledge and business methods (sales organization, service realization, etc.).

## 2.2. Factors that influence the process of diffusion of innovations

There are many factors that depend on whether an innovation will be applied in practice. The degree and speed of the expansion of innovation are significantly influenced by the following factors: (1) global (in accordance with the processes of globalization and internationalization, politics, technology and the like, with the significant role of international companies), (2) economically (through the transfer of innovation, competitive and long-term sustainable position in a particular market), (3) financially (considering the availability of capital both for investment in research and development that will result in innovations, and for the purchase of innovations through licenses, patents and other forms of intellectual property under protection) (4) resources (a number of natural and other resources, counting the geographical position or proximity of the market that is large enough or economically strong to accept innovation in the form of new products and services) [2, p. 115].

Numerous and diverse factors of the impact on the diffusion of innovation can be classified into two groups:

1. **Economic factors.** In the modern economy, every business activity should be *economically justified*. This is especially true for innovations given that they are preceded by significant engagement of human and financial resources. Research costs, regardless of whether they are from own funds or bank loans, must be reimbursed. This will only be achieved if innovation can be marketed at certain prices.

- *Diffusion time*, one innovation will depend on how much investment in innovation is economically viable and cost-effective. When innovation becomes economically justified and as such begins to be used in practice, it will be accepted by other business entities who do not want to lag behind the innovator.
  - *Price of production factor* (labor, work, and labor) are also an important input element for the expansion of an innovation. Each innovation should provide optimal costs and a combination of production factors in order to achieve the appropriate rates of basic economic indicators (productivity, cost-effectiveness and profitability rates).
  - *Life expectancy of fixed assets* also has a significant impact on the spread of innovation. The longer this is, the innovation will be more rapidly and more widely spread.
2. **Socio-psychological factors.** A favorable social and innovative climate, institutional support for innovative processes, encouraging creativity, a desire for social satisfaction and prestige are positive for the expansion of innovation. On the other hand, lack of interest, insufficient professional and practical knowledge, as well as the absence of stimulative measures at the micro and macro level for innovation, will negatively affect the innovative processes and, consequently, their spread.

Numerous socio-psychological factors are best systematized as barriers and limitations on the macro and micro level [5, p. 13-18]. Prerequisites at macro level: (1) *innovative climate and traditions in society*, (2) *legal security* in the form of legal protection of innovations, intellectual property, patents, (3) *institutional support* at state and local level for the development of entrepreneurship, innovative processes and transfer of innovations in country and abroad.

In the framework of support from the competent institutions of the Republic of Serbia, it is necessary to mention those activities that are specifically aimed at encouraging the innovation of domestic companies and the spread of innovative products to foreign markets. One of them is the Competitiveness and Innovation framework Program (CIP). It started in 2007 and lasted until 2012. At the end of 2008, Serbia entered into its sub-program „The Entrepreneurship and Innovation Program” (EIP) as a full member [5, p. 106]. Through the EIP, the SME sector has been given easier access to funding sources, and innovation is particularly encouraged with an emphasis on eco-innovation.

*Preconditions at the micro level:* (1) fostering innovative processes in businesses, in that innovation often occurs in enterprises, (2) motivation of employees and management to permanently innovate not only products and services, but also production processes and organization of all business, (3) stimulating and rewarding employees and management (innovators in companies need to receive fair financial incentives, to know that they can count on improvement and better workplace and other types of financial and non-financial incentives due to their innovation and creativity), (4) acceptance and understanding of changes in the environment (this is certainly one of the most important factors contributing to the expansion of innovation), (5) willingness to cooperate with innovators, scientific institutions, development centers and financial institutions. Innovation often requires the engagement of human and financial resources beyond the real possibilities of a business entity. Carriers of innovative processes must be aware of certain obstacles that can significantly impede the emergence of innovations and their dissemination to stakeholders.

*Barriers to disseminating innovation at the macro level:* (1) insufficient and inadequate protection of intellectual property, (2) administrative barriers at the state level, (3) inadequate institutional support for innovative processes, (4) non-imitative customs and tax policy.

*Obstacles to the spread of innovation at the level of business entities:* (1) unwillingness to accept newspaper in business (this is one of the biggest obstacles to the spread of innovation. It happens that owners and employees simply do not want to accept the inevitable changes in the production program and organizational processes) (2) lack of financial resources for the development of innovations and their purchase (although at first glance it acts as an insurmountable obstacle for many economic entities, there is a solution for such situations). In the first place, it refers to numerous institutions and measures of state and local authorities that stimulate application of innovations).

### **2.3. Phases of diffusion of innovation**

The expansion of innovation, that is, the period from creating innovation to its application in practice by different subjects is a process that requires a certain period of time and is carried out at certain stages.

According to Roger (Everett M. Rogers), an American theoretician and professor deemed to be a pioneer in theoretical consideration of the diffusion of innovations and the author of the often-used term *early adopter* [10] (the term that denotes *early adopters or early followers*-subjects that accept innovations immediately after the innovator).

There are also different views of the phase implementation of the expansion of innovation. According to such an understanding, the diffusion of innovation is carried out through three phases. In the initial phase, stakeholders are introduced to innovation. In the next phase, the adoption of innovation follows, resulting in the final phase - *the practical application of innovation*.

### **2.4. Specificity of the diffusion of innovation in the sector SME**

Since micro, small and medium enterprises account for around 99% of the total number of companies in the world and in our country, it is necessary to point out some of the specifics that are present in the process of diffusion of innovations within these companies.

Innovation is the main *source of vitality* for entrepreneurs, small and medium-sized enterprises. They are also the *factor of their survival* on the market in conditions of pronounced competition.

Small and medium-sized enterprises are the bearers of innovative processes in branches and emerging industries, unlike mature branches where, in terms of innovation, large enterprises and international corporations are of considerable advantage. *The main innovative advantage of the SME sector is the speed* - the ability to react very quickly to changes in the environment, which are often sudden. On the other hand, the greatest constraints on even greater innovation in this sector are the lack of experts and financial resources for a costly research.

Taking into account all the advantages and disadvantages of this sector in terms of innovation, special attention must be paid to *the attitude of employees in introducing innovations*. Owners and management in the micro, small and medium-sized enterprises and entrepreneurs must be aware of the fact that *employees react differently to the innovations introduced* and that open or covert resistance to change is possible.

## 2.5. Economic justification for the introduction of innovations

Any innovation can be viewed from a purely technical point of view, of social importance and economic justification. From the point of view of economic subjects, the most important is the *economic aspect of innovation*, that is, it is economically justified to expand the innovation. It should be emphasized that there are numerous innovations which from purely economic aspect are not justified, but therefore have a wider social significance. It is about numerous innovations related to environmental protection, health care of the population, education, defense capability of the state, etc.

The innovation economy focuses on maximizing profits. It is necessary to take into account other important indicators: the impact on the ecological environment, working conditions and safety at work, the quality of products, the time needed for the adoption of innovation, the state of competition, the ability to conquer new markets. Moreover, if innovation is economically justified for a single undertaking, it does not necessarily mean that there is an economic justification for its introduction to another company, business branch or market.

## 2.6. Advantages and disadvantages of the process of spreading innovations

Every social, economic, scientific and political activity must be viewed from different aspects, that is, to recognize the advantages, but at the same time, the disadvantages that each process and every phenomenon has.

*The benefits* of spreading innovation are more than familiar. They also enable those companies and societies in general where innovative processes did not sufficiently come to life, to get through the necessary news.

Also, if the innovation is accepted by a sufficient number of stakeholders and if the goals of introducing innovations are met, it is said that the effects of spreading innovation are positive.

*Deficiency* the process of spreading innovation leads to numerous negative economic and social effects.

In particular, the negative side should be emphasized and the „*abuse*” of innovations in the so-called „*psychological obsolescence*” of the product. It is an unnecessary shortening of the life span of individual products through the introduction of unreasonable changes in products, in order to distinguish one product at any cost from the competition. This should also be added to the practice that new products often involve new unrealistically high prices, which means that consumers are expensive to pay for unnecessary innovations.

Negative effects of the expansion of innovation can be recognized in practice that some entities prefer to buy ready-made innovations instead of developing innovative processes themselves. In this way they become dependent on innovators, often in the form of international companies.

## 2.7. Multinational Models of Innovation Spread

In professional literature in this field, four models of the expansion of innovations are commonly mentioned [1, 2005, p. 671-683].

*Aggregate models* observe the diffusion of innovations at the level of the whole population or groups of possible users, assuming that such groups are homogeneous.

*Models of repeated purchase* aim to explain the process of expanding innovations related to consumer product innovation. *Models on the micro level* observe individuals as potential beneficiaries (innovators) of innovation. Bearing in mind that modern business conditions are characterized by globalization and a significant volume of international trade, the diffusion of innovation must be seen in these frameworks. In practice, this means that it is not possible to observe the process of disseminating innovation closely - only within the framework of one state, but all aspects of transfer of innovation in the nearer and wider environment of the country from which the innovation comes in must be taken into account. That is why *multinational models* of diffusion of innovations are being developed.

### **2.7.1.      *Bass's model of diffusion of innovation***

Basov [7] model (Bass Model or Bass Diffusion Model) refers to the theory of determining the initial - initial purchase of new durable products. It lists the growth model according to which the sale goes up the line to the maximum point, after which the sale decreases. He was the first to give a model of the expansion of innovations according to the principle of the model of the spread of the epidemic [1, 2005, p. 672]. Innovation, according to this model, is spreading like an epidemic, those subjects that have not yet adopted innovations are „infected” with those who have already adopted innovations. By the flow of time, innovation will be adopted if not from all then by most of the entities.

By the time the innovations were adopted, Bas distinguishes two types of subjects. In the first place are innovators - individual entities that adopt innovations independently of other subjects while in the second group - imitators all other subjects.

Bases' model of diffusion of innovation is the basis for a number of models of expansion of innovations in international economic relations. Otherwise, Bas, besides Rogers, is the pioneer in the research of innovation in the field of marketing [1, 2005, p. 673].

### **2.7.2.      *Specificity of the process of diffusion of innovations at the international level***

The focus on foreign markets, the need for growth through appearances in foreign markets and the existence of international companies imposes the need for a planned approach to diffusion of innovations in foreign markets. That is why models of diffusion of innovations are needed in order to accelerate the sales and marketing efforts of business entities in the performance of one or more foreign markets.

There are two approaches to consider the spread of innovations in international markets. *The first approach* is based on researching the differences between processes in the two countries in terms of linking these differences and specificities with social and cultural differences. The expansion of innovation is considered separately for each country, after which the obtained results are compared and specificities are determined. *The second approach* has a basis in considering the interaction between the process of spreading innovation in two countries. The interactions between the observed countries are approached by two methods: (1) the influence of the country where innovation is first introduced to another country, and (2) the learning effect. This effect is



influenced by the specificities of a country that respects economic and cultural similarities and time between the introduction of products into these two countries [1, 2005, p. 675].

*Model Gatignon, Eliashberg, Robertson* is one of the pioneering works dealing with the differences in the spread of innovation in different countries. This model, based on the Basa model, shows the connection between cosmopolitanism, mobility and the participation of the female population in the total labor force from one and the spread of innovation on the other. Their research suggests that a higher level of cosmopolitanism is associated with a greater tendency to innovate, while a higher level of mobility is associated with a larger immigration pattern. The influence of women depends on their role in the purchasing decision-making process [1, 2005, 675].

*Model Parker, Dekimpex, Sarvary* estimates the parameters taking into account the differences between the cultures of different countries. Their research is based on the diffusion of innovations in over 180 countries across six continents. Otherwise, the study was done for the needs of the mobile phone industry and shows that ethical heterogeneity has a negative, and income per capita has a positive impact on the spread of innovation. The disadvantage of this model is that it only applies to the mobile phone industry, but not to some other industry.

*Model Tellefsen and Tekada* deals with the influence of the availability of mass media (television, radio, newspapers) in the process of diffusion of innovations in different countries. Their study shows that the prevalence of television as a medium largely affects the coefficient of external influence. Also, they found a negative relationship between newspapers and the coefficient of internal influence. The limitations of this model lie in the fact that the authors measured the impact of mass media on the sale of new products, while not taking into account a number of cultural, political, social and other specific countries.

### **2.7.3. Research into the interaction between the processes of spreading innovation in more different countries**

The expansion of innovations in international economic relations can also be viewed through the exploration of interdependence among the processes of expansion of innovations that take place in different markets [1, 2005, p. 673-682]. In this way, one phenomenon, in our case, the expansion of innovation, is seen wider and more complete. This is because information holders in one country today have information (primarily thanks to the internet, raising awareness about consumer rights and a significant impact on consumer movements) about products, their prices, quality and sales conditions in some other countries.

The impact of the cultural context and the time of introducing innovation in the two countries to the process of disseminating innovation is the subject of research by the expert team, *Hirokaz Takada, Dipak Jain*. They conclude that the diffusion rate of innovation is higher in countries with higher education *cultural context* i.e. which have a higher coefficient of imitation and in which the importance of mutual communication is attached. As regards *of the time aspect*, the opinions are that innovations are more quickly adopted in the country where the product was subsequently introduced.

Unlike Takada and Jain, another group of authors in their research did not establish a positive relationship between the time lag of introducing innovation and the rate of adoption. *Kristiaan Helsen, Kamel Jediidi, Wayne DeSabro* have explored to what extent countries with similar

macroeconomic variables have the same or similar models of diffusion of innovation. They have established that segments of countries based on expansion patterns do not correspond to traditional segments according to macroeconomic indicators, but rather depend on the product itself.

*Kalish, Mahajan, Muller* deal with the influence of the first country to explain the choices between the water strategy and the shower strategy when entering the foreign market.

*Waterfall strategy* means that the economic entity has chosen to gradually enter the foreign market. The company first sells its product or products on the domestic market, then to the developed foreign markets and later to the less developed markets and emerging markets. Unlike this gradual conquest of the market, the strategy of the shower implies that all markets are simultaneously ,’ attacked ,’.

*Impact of the first country* shows the effects to which consumers are exposed in countries where innovations are introduced later. Namely, consumers in such countries have the ability to monitor what is happening with innovations in the initial market and get to know it before this innovation appears on their (home) market. In this way, the risk of first and early purchase is considerably reduced, which certainly reduces the period of adoption and expansion of innovation.

Ganesh, Kumar also dealt with the influence of the country of origin of innovation (the leader country) on a land that later accepts innovation and introduces professional literature *learning effect*. They consider that the success of a product in one country reduces the risk of its introduction in a country that later introduces it. The rapid expansion of innovation in a country that later introduces it can also be explained by the following: the manufacturer has enough time to improve its product and marketing performances and, therefore, better position itself in the awareness of consumers in such markets.

*Sundqvist, Frank, Puumalainen* analyze the cultural effects, the effects of time and the effects of the earth. They think that *the effect of time* has the greatest impact on the expansion of innovation by which innovation is expanding faster in those countries where innovation was introduced later.

*The effect of culture* it works in two ways. The year of adoption depends on the cultural diversity in relation to the country of the source of innovation, and beyond that, the cultures that avoid uncertainty are more focused on imitation.

Respecting the results and significance of these studies, some common characteristics that limit their application in underdeveloped countries must be highlighted. It is the following: (1) in previous studies, the emphasis is on researching the spread of innovation in highly developed countries (it is clear that there are significant differences between developed and underdeveloped countries and that the results of such studies can hardly be applied to underdeveloped countries), (2) these studies, as a rule, relate to innovations in the field of durable consumer goods and products produced as a result of high technology, (3) studies presuppose an open economy, or the country’s involvement in international economic flows, (4) studies do not explore the impact of different restrictions on international trade in the form of non-tariff barriers, import quotas, licenses and the like.

Models of the expansion of innovations in the international market have practical application in real business conditions when it comes to choosing a strategy for entering a selected market,

choosing a market (one country or group of countries) and determining the time to enter the foreign market. Also, the laws that many researchers have found to be valid for one innovation group does not mean that they will automatically apply to some other innovation groups in these same markets. All this points to the importance of knowing the essence of the model, its advantages and disadvantages, as well as the numerous specificities of the market and innovation, with the aim of getting the most accurate estimates.

### 3. CONCLUSION

Innovations are undoubtedly one of the most important factors of survival in the market and the competitive advantages of each undertaking. Innovation and innovation as a result of human creativity can be viewed from different aspects of which the diffusion of innovation is among the most important.

Innovation not only refers to products (completely new or to some extent innovated existing ones), but also to new organizational models, new production processes and methods, and the like. Innovations include new markets, more precisely conquest and entry into regions (regions, countries or groups of related countries), where one business entity has not yet achieved business activity by then. These include the so-called. the „new combination” of existing material and human resources.

The possibility of practical implementation of an innovation on an economically justified basis is, if not the most important, then surely *one of the most important assumptions for what is the subject of this paper - diffusion, i.e. expansion of innovations.*

Without the fulfillment of this condition, there is no social or economic basis for the sale or purchase of an innovation, regardless of the amount of news that it represented in its field. In order for one innovation to come to life in practice, *it must have practical value* that is, to satisfy some human need, but at the same time to enable its creator and user a certain economic and social benefit. The expansion of innovation must also have external support. This means that legal security must be provided to the bearers of innovation through various forms of intellectual property protection - patents, licenses, trademarks, industrial design, protection of the geographical origin of a particular product, and more recently through the topography of semiconductor products.

In the professional literature, the past decade has seen an interest in *finding optimal models of diffusion of innovations* with a special focus on placing innovations on the international market. Depending on the author's understanding and the results of numerous studies, the emphasis is on the quantitative (Bas) or qualitative or psycho-sociological aspect of the expansion of innovation (Rogers); the consideration of the impact of the country of origin of innovation on the countries adopting innovation, the time period necessary to pass from the onset of innovation to its acceptance; cultural, economic and other differences between the countries of origin of innovation and the countries of the adopters of innovations; the impact of mass media and marketing mix on the speed and scope of the expansion of innovation; the influence of the image that has the country of origin of innovation, and the company on potential innovators of innovations, etc.

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# EVALUATION OF ENVIRONMENTAL CONDITION OF “GJANICA” RIVER MEASURING PHYSICO-CHEMICAL PARAMETERS

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**Abstract:** *This paper aims to evaluate the environmental condition of the „Gjanica” river by analyzing different physiochemical parameters. Pollution has been present in this river since the beginning of industrialization and urbanization of the city of Fier, Albania.*

*The main sources of surface water pollution in this country are wastewaters containing organic substances, soluble phosphorous and nitrogen compounds that favor the eutrophication process. A major pollutant of this river has as its source also the oil refinery that discharges untreated waters.*

*Sampling was carried out at 5 points along the „Gjanica” river, points in which there are significant changes of allowed values of surface water parameters.*

*Experiments carried out are: pH determination, Redox potential determination, Electrical conductivity determination, dissolved O<sub>2</sub>, BOD<sub>5</sub>, Alkalinity, Chlorides. The assessment of natural waters quality is determined on the physical-chemical parameters comparing with the allowed values in the EU Water Framework Directive.*

**Keywords:** *water; wastewater; eutrophication; physiochemical parameter; pH, BOD*

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## 1. INTRODUCTION

Gjanica River, 60 km long, is the main branch of the Seman River and describes it throughout the city of Fier, Albania. The irrational deforestation along the river banks has provoked erosion growth. The problem of Gjanica River pollution has been most aggravated in the last 20 years, with the increase of population and the increase of the activities of different businesses and, this river has already turned into a large collector of sewage. One of the main pollutants of this river is the oil refinery that discharges untreated waters as they are not equipped with a water treatment plant. Oil, which comes from fields of oil wells pollutes and gives the water a smooth surface. Meanwhile, both raw water and industrial waste discharges cause river contamination by organic and inorganic contamination. Historically this river has been also polluted by the chemical fertilizer plant (ammonia, methanol, arsenic, nitrates and phosphates).

Urbanization and industrialization processes bring large amounts of polluted wastewater into the surface waters. The main sources of surface water pollution in our country are urban discharges containing organic substances, soluble phosphorous and nitrogen compounds, which favor the eutrophication process, bacterial and pathogenic viruses, heavy metals, and substances that disrupt the appearance of water and give them a bad smell.

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Urban, industrial and agricultural wastewater discharges into surface waters are a phenomenon that has progressively reduced the quality of rivers, lakes, coastal areas, and the environment in general. In this sense, it is important to assess the quality of surface waters and determine the main pollutants that are discharged into them, with the aim of protecting and / or rehabilitating the environment for integral and sustainable management of water resources.

## 2. METHODOLOGY AND RESULTS

Sampling took place at 5 points along the „Gjanica” river, points where there are significant changes in the allowed values of surface water parameters. The samples were packed in 1.5L polyethylene bottles. Sampling was performed on a day in a month and all the samples were taken during one hour. During this time the samples were protected from the atmosphere oxygen, sunlight and stored in the refrigerator at 2-8 °C. The time for conducting the experiments, from the sampling point, was 0-10 days.

**Table 1:** Sampling points

<i>Sampling points</i>	<i>Location</i>
Sample 1 (M1)	Near the source
Sample 2 (M2)	Shaban Agai bridge (Ballsh)
Sample 3 (M3)	Visoka bridge
Sample 4 (M4)	On the bridge in the city center
Sample 5 (M5)	“Gjanica” effluent stream

During the analyzes of waters were performed these measurements:

- Determination of pH,
- Determining the Redox Potential,
- Determination of electrical conductivity,
- O<sub>2</sub> dissolved,
- BOD (biological oxygen demand),
- Alkalinity,
- Chloride,
- Determination of solid matter.

The assessment of the quality of natural waters is determined on the basis of physiochemical parameters comparing with the permissible norms laid down in the EU Water Framework Directive.

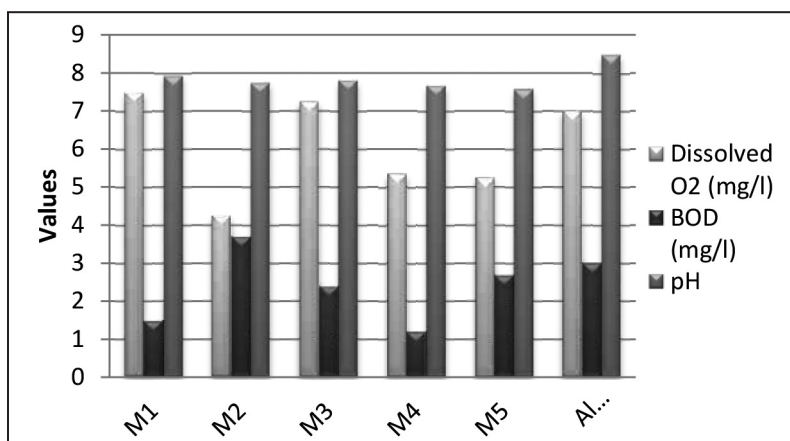
**Table 2.** Allowed norms of physical-chemical parameters

<i>Physicochemical Parameters</i>	<i>Allowed values</i>
Dissolved Oxygen	>7mg/l
Temperature	14-20 °C
pH	<8.5
BOD	<3.0mg/l
P-PO <sub>4</sub> <sup>3-</sup>	<0.4mg/l
N-NO <sub>2</sub>	<0.12mg/l
N-NO <sub>3</sub>	<0.8mg/l
Alkalinity	100-250mg/l
Chlorides	45-155mg/l

## 2.1. Determination of physic – chemical parameters:

**Table 3.** Experimental results obtained during the analysis of samples for dissolved oxygen, BOD, pH

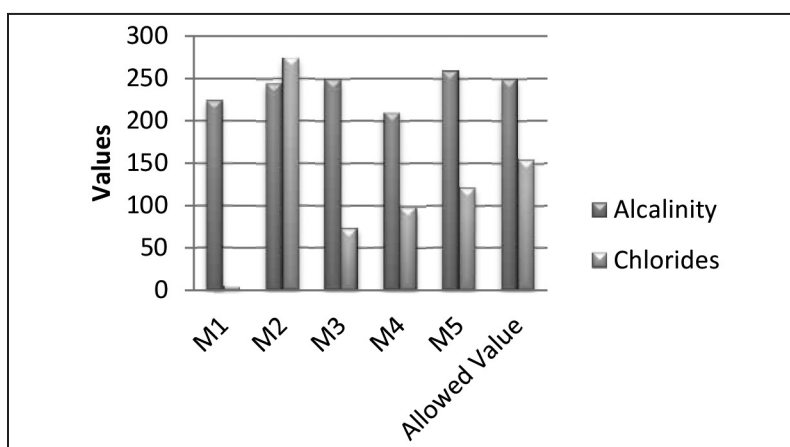
	<i>Dissolved O<sub>2</sub> (mg/l)</i>	<i>O<sub>2</sub> %</i>	<i>BOD (mg/l)</i>	<i>pH</i>
M1	7.5	93	1.5	7.93
M2	4.25	38	3.7	7.76
M3	7.25	79	2.4	7.82
M4	5.35	60.3	1.2	7.67
M5	5.25	52.1	2.7	7.59



**Figure 1.** Graphic dependence of three parameters taken from analysis compared to the allowed values

**Table 4.** Experimental results obtained during the analysis of samples for alkalinity, conductivity, chlorides and redox potential

	<i>Alkalinity (mg /l)</i>	<i>Conductivity (μs)</i>	<i>Chlorides (mg/l)</i>	<i>Redox potential (mv)</i>
M1	225	636	4.5	-54
M2	245	1216	274.43	-53
M3	250	928	73.48	-47
M4	210	1027	97.97	-38
M5	260	1100	121.47	-40



**Figure 2.** Graphic dependence of alkalinity and chlorides from the allowed values

## 2.2. Determination of nitrates $\text{N-NO}_3^-$

The results of work we have taken from measurements on standards:

**Table 5.** Presents concentrations for the preparation of standard  $\text{N-NO}_3^-$

	<i>Pb</i>	<i>St.1</i>	<i>St.2</i>	<i>St.3</i>	<i>St.4</i>
$C_{\text{N-NO}_3}(\text{mg/l})$	0.0	0.1	0.2	0.5	1
$V_{\text{N-NO}_3}(\text{ml})$	0	50 $\mu\text{l}$	100 $\mu\text{l}$	250 $\mu\text{l}$	500 $\mu\text{l}$
$V_{\text{H}_2\text{O}}(\text{ml})$	50	50	50	50	50
$A_{220\text{nm}}$	0.0	0.358	0.707	1.476	2.998
$A_{275\text{nm}}$	0.0	0.002	0.003	0.007	0.000

From the results obtained from the treatment of the samples, we calculate the absorption for nitrate ions according to the formula:

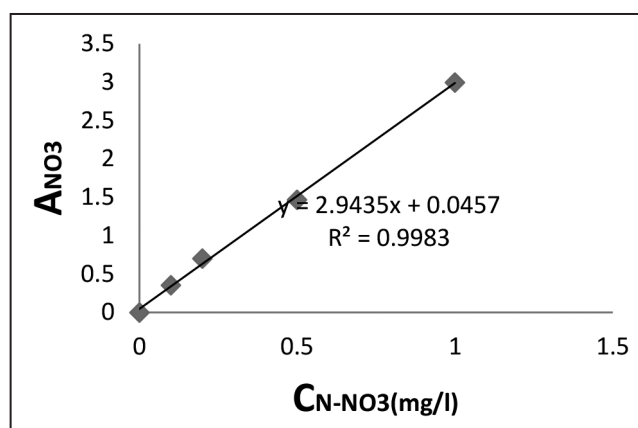
$$A_{\text{NO}_3} = A_{220} - (2 * A_{275})$$

Calculated values are shown in the following table:

**Table 6.** Experimental results obtained during the  $\text{N-NO}_3$  absorption difference and organic matter of water samples of the „Gjanica” river

	<i>Pb</i>	<i>St.1</i>	<i>St.2</i>	<i>St.3</i>	<i>St.4</i>
$C_{\text{N-NO}_3}(\text{mg/l})$	0.0	0.1	0.2	0.5	1
$A_{\text{NO}_3}$	0	0.356	0.704	1.469	2.998

Now we build the calibration curve for the above data:



**Figure 3.** Calibration curve of nitrate ion standards  $\text{N-NO}_3$

Observing the calibration curve, we see that the linearity dependence is according to the formula:

$$Y = 2.9433x + 0.0456 \text{ when: } y \rightarrow \text{absorbance value}$$

$$A_x = 2.9433C_x + 0.0456 \text{ } x \rightarrow \text{concentration values}$$

Calculate the concentration of nitrate ions for the samples taken in the study:

$$C_x = (A_x - 0.0456) / 2.9433$$

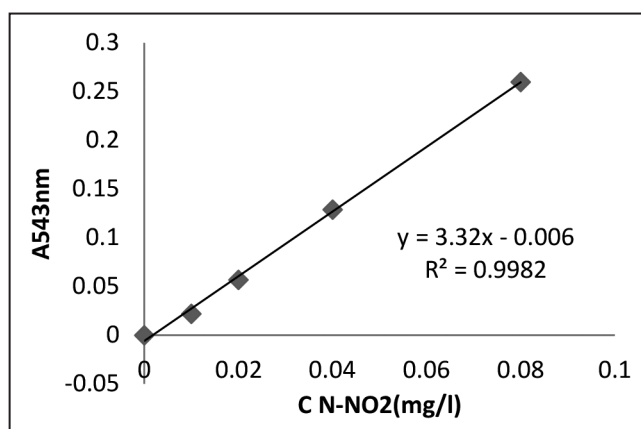
**Table 7.** The experimental results obtained during the analysis of N-NO<sub>3</sub> ions

<i>Ax(nm)</i>	<i>0.228</i>	<i>0.110</i>	<i>0.139</i>	<i>0.766</i>	<i>0.620</i>
<i>Cx(mg/l)</i>	0.08	0.021	0.031	0.24	0.19

### 2.3. Determination of nitrite N-NO<sub>2</sub><sup>-</sup>

**Table 8.** Concentrations for the preparation of standard solutions of N-NO<sub>2</sub><sup>-</sup>

	<i>Pb</i>	<i>St.1</i>	<i>St.2</i>	<i>St.3</i>	<i>St.4</i>
<i>C<sub>N-NO2</sub>(mg/l)</i>	0.0	0.01	0.02	0.04	0.08
<i>V(ml) of st. 10 mg/l</i>	0	50μl	100μl	200μl	400μl
<i>V<sub>H2O</sub>(ml)</i>	50	50	50	50	50
<i>A<sub>543nm</sub></i>	0	0.022	0.057	0.129	0.260



**Figure 4.** Calibration curve of nitrite ion standards N-NO<sub>2</sub><sup>-</sup>

From the calibration curve we find concentrations of nitrite ions N-NO<sub>2</sub><sup>-</sup>:

$$y = 3.32x - 0.006 \quad \text{when: } y \rightarrow \text{absorbance value}$$

$$Ax = 3.32Cx - 0.006 \quad x \rightarrow \text{concentration value}$$

$$Cx = (Ax + 0.006) / 3.32$$

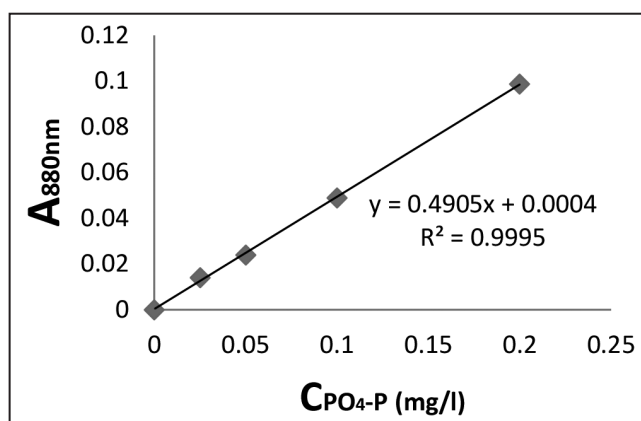
**Table 9.** The experimental results obtained during the analysis of N-NO<sub>2</sub> ions

<i>Ax(nm)</i>	<i>0.002</i>	<i>0.015</i>	<i>0.011</i>	<i>0.01</i>	<i>0.01</i>
<i>Cx(mg/l)</i>	0.002	0.006	0.005	0.0048	0.0048

### 2.4. Determination of phosphate ions P-PO<sub>4</sub><sup>3-</sup>

**Table 10.** Concentrations for the preparation of standard solutions P-PO<sub>4</sub><sup>3-</sup>

	<i>Pb</i>	<i>St.1</i>	<i>St.2</i>	<i>St.3</i>	<i>St.4</i>
<i>C i PO<sub>4</sub><sup>3-</sup>-P</i>	0.0	0.025	0.05	0.1	0.2
<i>V(ml) I work st 10(mg/l)</i>	0	125μl	250μl	500μl	1000μl
<i>V<sub>H2O</sub>(ml)</i>	50	50	50	50	50
<i>A<sub>880nm</sub></i>	0	0.014	0.024	0.049	0.0987



**Figure 5.** Calibration curve of phosphate ions P-PO<sub>4</sub><sup>3-</sup>

$$y = 0.4905x + 0.0004 \quad \text{when: } y \rightarrow \text{absorbance value}$$

$$A_x = 0.4905C_x + 0.0004 \quad x \rightarrow \text{concentration value}$$

$$C_x = (A_x - 0.0004) / 0.4905$$

**Table 11.** The experimental results obtained during the analysis of P-PO<sub>4</sub><sup>3-</sup> ions

<i>A<sub>x</sub>(nm)</i>	<i>1.688</i>	<i>1.698</i>	<i>1.555</i>	<i>1.813</i>	<i>1.766</i>
<i>C<sub>x</sub>(mg/l)</i>	3.44	3.46	3.16	3.69	3.59

### 3. CONCLUSION

From this study we carried out that the samples taken over the river „Gjanica” are generally polluted throughout the river bed, but the largest pollution is exactly the point that is directly affected by untreated waters discharge. Also, we can't leave behind the other part of the river which is polluted by the sewage that drains on it, and other industrial discharges that have their activities near the river bed.

To conclude, we suggest the construction of a wastewater plants for minimizing the pollution of the Gjanica River, especially of the Ballsh Plant, and the immediate placement of filters for all industries that discharge their discharge into this river.

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# SUSTAINABLE SUPPLY CHAIN RELATIONSHIPS: ANALYSIS OF A PACKAGING MANUFACTURING CASE

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**Abstract:** *Many firms attribute strategic importance to environmental issues. Among the firms that adopt this strategy, we can mention those that use the residues or waste of the processing cycles in further industrial transformation processes. The research work is focused on the study of an explanatory case of sustainability of the production process. As regards the methodology used, an excellent business case was analysed, and an interpretative, qualitative approach has been chosen. Although this is a research that is still in progress, some theoretical and conceptual systems can be proposed here.*

**Keywords:** *sustainability, supply chain integration, operations.*

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## 1. INTRODUCTION

They are inclined to make huge investments for the adoption of non-polluting technological solutions in production systems, as well as to start internal training activities to increase the skills of human resources in environmental matters and also to design specific and well detailed internal organizational procedures. This is the case of companies that use productive technologies powered by renewable energy sources and reduce the emission of CO<sub>2</sub>, or that use materials whose production does not compromise the production contexts of the countries of origin. Among the firms that adopt this strategy, we can mention those that use the residues or waste of the processing cycles in further industrial transformation processes. The research work is focused on the study of an explanatory case of sustainability of the production process. In practice, an excellent firm in the packaging industry has made huge productive investments to acquire and successfully implement a new production process aimed at reprocessing and regenerating the residues (processing waste) of the materials used in the main production process. One of the objectives of this study is to verify whether for a medium-sized business the external search produces more effective effects on innovative processes types.

Since recent researches suggest that process innovation and business model innovation (BMI) can be pursued separately or concurrently, the study intends to investigate what are the innovative processes relevant to a firm projected to sustainability. As far as the structure of the work is concerned, it is structured as follows: initially the theoretical framework that is still undergoing further systematization is presented, then the conduct of the investigative analysis in the field is illustrated, and finally some reader results that have been reached so far.

## 2. THEORETICAL FRAMEWORK

To innovate, organizations must search for new knowledge or for ways to recombine existing knowledge in novel ways, this is the pre-requisite to carry out research in new contexts in order to enter in distant industries.

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Firms are asked not to close themselves to their existing knowledge base or to the family one for the sector or sub-sector, but rather to undertake external search for knowledge. This is all the truer in the current era, where innovation is also recognized as a complex process that assembles different innovation types, such as product, process, and business model innovation (BMI).

Recent researches suggest that product, process, and BMI - a newly recognized innovation type [1], [2] can be pursued separately or concurrently [3], [4], [5].

Several authors have theoretically suggested separating BMI and process innovation, arguing that new business models can generate value through process innovation or without recourse to process innovation [6], [7]. Other authors consider BMI, product and process innovation as different innovation types [8], [5]. As well, other studies show that external search (relating to the number to the number of stakeholders with a different technological heritage and how intensively a firm resort to stakeholder innovation) is positively related to all the firm's innovative business processes types (business model, process) [3], [4].

The modification of the business model is concretely and profitably possible in the productive structures that with agility (operational agility) adapt to the new ways of competing.

The modification of the business model and the resulting value creation are sources of a competitive advantage that is also modified, since it is different, sometimes significantly, from the past. In strategic management studies, traditionally focused on the formulation of decisions, increasing importance is given to the analysis of how changes are generated and to the evaluation of the effects they generate [9].

The following two search traces are assumed.

**H1a:** The new production knowledge is the basis of the firm's innovative processes in a sustainability perspective.

**H1b:** Process innovation that leverages internal research is the prerequisite for diversifying the technological background and developing sustainable strategies in the historical and new business models.

A firm's ability to conceive performance-enhancing business models (BMs) in the sense of sustainability has become a cornerstone of competitive advantage. Sustainable supply chain governance is possible if it involves all the physical and information flows of the processes that make up the operations of the companies belonging to the supply chain.

Integration is important. The theoretical framework takes into consideration the relational approach [10], [11], [12] between economic actors based on two theoretical frameworks: the first, in the long term, takes into consideration the resource-based view; the second focuses on network analysis.

Numerous managerial studies have made use of the theoretical scheme focused on resources - resource based view (RBV) - to analyse how various forms of integration between supply chain actors and companies impact on their performance [13], [14], [15]. The resource-based approach

makes it possible to estimate the value of the ‘relational resources’ that are developed in the ‘buyer-supplier’ relations.

**H2:** The relationships between operations in the supply chain are the basis of the evolution of the value created by the supply chain.

### 3. METHODOLOGY

The methodology involves the longitudinal analysis of an excellent company case, located in central Italy, which has been investigated in the last five years. An interpretative, qualitative approach is chosen because it helps to navigate and understand the complex issues that are associated with the data quality concept, and its relation to the factors involving managerial practices to implement facilities in modern relationships within the supply chain [16]. ‘Oriented case study’ investigates the issue within a real-life context, drawing on the reviews of a number of sources, and provides the means to review theory and practice iteratively [17], [13], [18]. For a detailed analysis of the study and investigation methods, see the following table (table 1).

**Table 1:** Overview of data collection

Primary data	<b>FIRM data</b> <b>Semi-structured interviews</b> <ul style="list-style-type: none"> <li>- entrepreneur</li> <li>- manager of the first managerial line</li> <li>- heads and foreman in the production area</li> <li>- university curricular internship</li> <li>- follow up interviews (with all the interviewees)</li> </ul> <b>SUPPLIERS</b> <ul style="list-style-type: none"> <li>- explorative interviews: managing director</li> <li>- semi-structured interviews: managing director and workers of technical areas</li> <li>- follow up interviews (with all the interviewees)</li> </ul>
Secondary data	<b>Internal communication documents</b> <ul style="list-style-type: none"> <li>- economic-financial firm annual reports</li> <li>- internal communication to employees</li> <li>- internal workshops and seminars</li> </ul> <b>External communication documents</b> <ul style="list-style-type: none"> <li>- specialist presentations by managers for external audiences (on the occasion of the auditors’ audit; supply chain partners)</li> <li>- website and press releases downloaded (both of the firm and of the consortium)</li> <li>- speeches on conferences and/or fairs</li> </ul> <b>Publications relating to the firm by third parties</b> <ul style="list-style-type: none"> <li>- Publications related to the consortium from business schools</li> <li>- Master’s degree thesis</li> </ul>

### 4. THE STRATEGY OF PRODUCTION DIVERSIFICATION FOR SUSTAINABILITY

The business model is defined as new, when it is the result of the design, by managers and entrepreneurs, of a radically new activity system for objectives, structure and forms of governance (architectural novelty of the business) or of a system, in which activities with elements of novelty (objectives, structure, governance) are integrated with unmodified activities (complementary news of the business) [19], [20],[21].



Although the RBV places emphasis almost exclusively on the benefits deriving from collaborations based on the development of resources that are specific (unique or dedicated) to each relationship, and therefore difficult to imitate, interactions between diversified supply chains emerge with increasing force in the competitive scenario.

The analysis of the supply chain in the relational perspective considers the interdependence that is created between companies and the willingness that they have to initiate and control forms of interaction that increase the degree of integration of the supply chain. Following the research results obtained, it emerged that buyers and suppliers, developing relational skills, favour the profitable circulation of information, which is the basis of cooperation based on mutual trust. Such a strong degree of integration determines the reduction of conflicts and the formation of relational revenues. The integration of supply chain operators or supply chain integration (SCI) is made possible by the ability of companies to cooperate with ‘critical suppliers and customers’ and more cooperation involves business managers (intra-organizational collaboration), managers of different companies, but belonging to a group or to a multinational (co-operation between home-mother and subsidiary), and managers of completely autonomous companies (inter-organizational cooperation) (see table 2).

Firm utilizes relationships for competitive advantage by accessing, integrating, and leveraging external resources. Specifically, one would like to deepen the relationship perspective that is based or could even be better developed with the network-level design of network-type relational structures. Networks are structures that convey information in markets, provide a competitive advantage to some actors over others, and offer opportunities otherwise unavailable. The network analysis allows the scholar to grasp two theoretical frameworks using the main international managerial literature, namely the relational based view and the resource-based view. In agreement with the relational based view, the network perspective sees supply chain as business network, where business units or firms are represented by nodes, and long-term complex interactions between them are represented by links [22].

**Table 2:** Key features of the two types of innovation on which it primarily relies

Feature	Business Model Innovation	Process Innovation
Unit of analysis	Value chain system (as structured between the focal firm, industrial clients, suppliers, stakeholders)	New technological process in internal production system
Knowledge needed	Knowledge about new architectures of productive combinations to reconfigure production-based activity structure needed and technical knowledge	Technical tacit knowledge needed, often difficult to codify
Relation within the value chain	Changes to the firm’s value chain due to changes in content, governance, and structure of relationships with value chain actors and with stakeholders	Design of new production systems; design of new production governance systems; new relationships in a value chain ( <i>upstream/middle of the value chain</i> )

## 5. FINDINGS

In the context of the resource-based view, academic interests are welcomed, stating that in the prerequisites of business, or strategic networks of success exploitation is much more recent. From a resource-based perspective firms differ in their capability to shape and exploit networks, to extent that their capability to leverage networks has been identified as distinctive.

Following the results obtained from the analysis of the case studied, it can be seen that especially the external search is positively related to the medium sized firm's innovative business processes types.

If firms seek increased operational performance, market performance, innovation and financial performance, they need to develop network specific capabilities. One such critical capability refers to management skills and competencies in developing valid views of networks and their potential evolution, a condition to perceive the opportunities embedded in networks.

Recent empirical studies refine the conceptualization of network pictures by testing the dimensions of this concept and adopting a dynamic view, focused on the processes through which networks are understood and strategy enacted within them.

Drawing on network analysis and RBV we find that established firms predominantly rely on newly and diversified external sources such as new process technology, relations with new stakeholders and internal sources (productive knowledge embedded in production systems and in internal R&D and engineering processes) when introducing new business models and when innovating processes.

To innovate, organizations must search for new knowledge or for ways to recombine existing knowledge in novel ways. This is all the truer in the current era, where innovation is also recognized as a complex process that assembles different innovation types, such as process and business model.

We provide two contributions to the literature. First, the much stronger empirical association between external search and BMI than between external search and process innovation suggests that BMI might enable established firms to escape the prior knowledge corridor and broaden their horizons. Second, we theoretically compare and empirically confirm how search practices relate to different innovation types, arguing that the underlying knowledge required for different innovation types influences the appropriate search practice in non-large firms operating in manufacturing sectors with strong environmental problems.

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# EUROPEAN HERITAGE CONSUMERS AND THEIR INVOLVEMENT: A CULTURAL MARKETING PERSPECTIVE

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**Abstract:** *Cultural heritage involvement and participation in the European Union are fairly modest: lack of interest, cost and lack of time are the main reasons, but the absence of a marketing vision also contributes to this overall limited cultural experience.*

*Paper defines the heritage involvement under a cultural marketing perspective, based on the inclination to discover, explore, experience and enjoy, and advances a corresponding classification of the heritage consumers, at the level of the European Union, using data from the dedicated Special Eurobarometer of the European Commission.*

**Keywords:** *Cultural experience, heritage involvement, cultural marketing, European Union.*

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## 1. INTRODUCTION

There are several definitions of reference given to the cultural heritage but most of them have a strong technical character aiming to provide an exhaustive description of its content. From a marketing perspective, expressing essentially a consumer-oriented view over the subject, the definition given by the ICOMOS International Cultural Tourism Committee (2002) is the most appropriate due to its emphasis on the experiences the heritage explorers may enjoy: expressions of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expression and values. Cultural heritage takes the forms of tangible (places of human habitation, villages, towns and cities, buildings, structures, art works, documents, handicrafts, musical instruments, furniture, clothing and items of personal decoration, religious, ritual and funerary objects, tools, machinery and equipment, and industrial systems) or intangible (all forms of traditional and popular or folk culture, the collective works originating in a given community and based on tradition – oral traditions, customs, languages, music, dance, rituals, festivals, traditional medicine and pharmacopeia, popular sports, food and the culinary arts and all kinds of special skill connected with the material aspects of culture) heritage [6].

In the words of Sandford (2019), heritage is something from the past, in the present, for the future consisting of what is passed to the next generation through mechanisms that enable taking present steps to pass on those aspects of the past that are valued, aspects that have a different object and play a different role in the private and public life, at different times [7]. Aiming to enrich the meaning of the term and to expand its coverage, Barrère (2016) has widened the word “heritage” using the plural – heritages – to include not just the “official” and “institutional” components (such as museums, libraries, archaeological and historic sites, archives), but also all those resulting from the accumulation and sedimentation of creativity, by the history that develops and passes culture through to society, with individuals, families, companies, industries, territories, societies, and, in the end, humanity as inheritors of these veritable resources from the past [2].

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Remarking that heritage does not actually exist until any specific elements inherited from the past, as well as those created in the present, are identified and labelled as such according to the current preferences, Babić (2015) advances the idea that, besides the economic exploitation, the “sincere” socially responsible heritage management must also take into account the socio-political features of heritage by answering the questions: why do we consider heritage and care for heritage important, who defines it and how, what affects and determines our position towards it, and, finally, who controls it and how, on whose behalf and to what purpose? [1]. Connecting the heritage and tourism, Yu and Xu (2019) have reviewed the studies in the field and observed that there are four interrelated dimensions in approaching the topic: the geographic scale covered; coverage of heritage resources; capacity of the heritage resources to create products for tourist consumption; and the structural strategy used to organize the rich heritage resources [10]. Discussing the increasingly pressing demand for heritage in hypermodern societies, Gravari-Barbas (2018) notes that not only heritage was a driver for tourism, but also tourism played an important role in the production of heritage, both in symbolic and physical terms, since from the 19<sup>th</sup> century, becoming an essential factor of heritage globalization (patrimonialisation), contributing to the production of an increasing diversity of heritage artifacts, and becoming a “heritage production machine” [5].

Santa-Cruz and López-Guzmán (2017) have found in the literature approaching the subject of heritage tourism an orientation toward the heritage consumer, in this case the heritage tourist, advancing the idea that this is not just a simple visitor of heritage or cultural attractions but a person visiting a place with heritage attributes, aware of and motivated by those attributes seen as a part of his or her own heritage [8]. Under a context in which cultural heritage can be seen as a cornerstone of the local, regional, national and European identity, and one of the most important resources to be handled in the regional development, Bujdosó et al. (2015) affirm that this effort should aim the consumers and their experience, production being carried out with their active inclusion the main purpose being is to create memorable experiences [3].

Refocusing from the heritage itself and its management to its consumer, with its particular needs, demands and expectations, represents a real challenge both in theory and in practice, as well as one of key drivers of the cultural heritage capitalization. The undergoing conceptual and operational transition from cultural economics, via cultural management, to cultural marketing should consider, as Thurley (2005) suggested, the heritage cycle centered on consumer and including the successively inter-connected stages of heritage understanding, valuing, carrying and enjoying [9]. This heritage consumer-oriented approach inspires to investigate the relationships between the proper capitalization of the cultural heritage and the involvement of the heritage consumer supported by four heritage consumer behaviours: the interest to discover the heritage, the desire to explore it, the experience acquired after getting in touch with it and the further willingness to enhance the experience by enjoying it. In few words, the heritage involvement of the consumer is the result of the interest, desire and willingness to discover, explore, experience and enjoy cultural heritage sites and/or activities.

## 2. METHODOLOGICAL NOTES

The assessment of the heritage consumers’ involvement from a cultural marketing perspective has been conducted considering a set of four research variables related to the main heritage related behaviors – discovery, exploration, experiencing and enjoyment, with the involvement seen as the result of the joint action of these conducts.



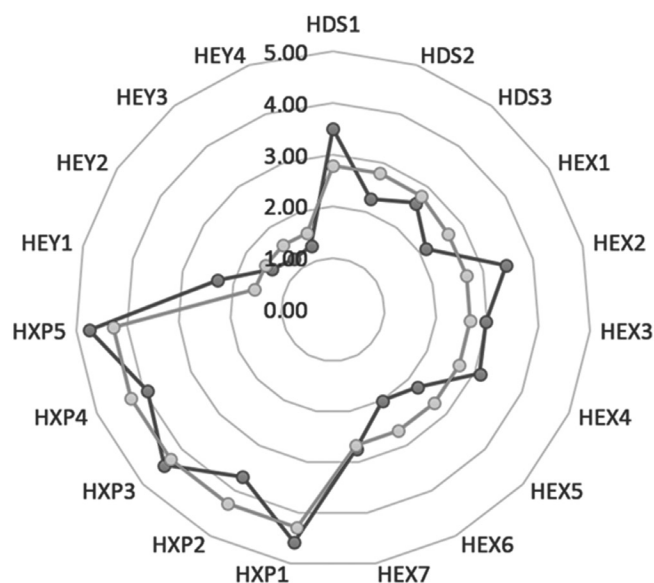
Conceptual definition of the research variables has been done considering the relevant definitions included in the Special Eurobarometer 466 on Cultural Heritage [4] as it follows:

1. Heritage Discovery (HDS): the extent to which heritage consumers are aware about the monuments, works of art, sites, traditional events or festivals located and/or happening nearby their living areas of the consumers. The specific subvariables are: (1.1.) HDS1: historical monuments or sites (palaces, castles, churches, archaeological sites, gardens, etc.); (1.2.) HDS2: works of arts in museums and galleries (excepting the commercial galleries); (1.3.) HDS3: traditional events or festivals.
2. Heritage Exploration (HEX): the specific weight of the heritage consumers visiting monuments, works of art, sites and/or attending traditional events or festivals. The specific subvariables are: (2.1.) HEX1: visiting libraries or archives (to consult manuscripts, documents, ancient maps, etc.); (2.2.) HEX2: visiting historical monuments or sites (palaces, castles, churches, archaeological sites, gardens, etc.); (2.3.) HEX3: visiting museums and galleries; (2.4.) HEX4: attending traditional events (food festivals, carnivals, puppet theatres, floral festivals, etc.); (2.5.) HEX5: visiting traditional craft workplaces (weaving, glass blowing, decorative art, embroidery, making musical instruments or pottery, etc.); (2.6.) HEX6: going to the cinema or a film heritage festival to see a classic European film produced at least ten years ago); (2.7.) HEX7: attending a traditional or classical performing arts event (music, including opera, dance or theatre, folk music, etc.).
3. Heritage Experience (HXP): main factors of heritage consumer satisfaction defined in marketing terms (products, prices, placement, promotion, personnel, physical evidence and processes). The specific subvariables are: (3.1.) HXP1: choice of cultural heritage sites or activities; (3.2.) HXP2: cost of accessing cultural heritage sites or activities; (3.3.) HXP3: accessibility of the cultural heritage sites or activities; (3.4.) HXP4: information regarding the cultural heritage sites or activities; (3.5.) HXP5: quality of the cultural heritage sites or activities.
4. Heritage Enjoyment (HEY): ways in which heritage consumers participate actively and enjoy the cultural heritage. The specific subvariables are: (4.1.) HEY1: regularly visiting sites (such as monuments, museums, etc.) or going to events (such as festivals, concerts, etc.); (4.2.) HEY2: doing a traditional activity (such as traditional dancing or singing, playing traditional music, traditional cooking, etc.); (4.3.) HEY3: voluntarily working for an organisation (a museum, an association, a foundation, etc.) that is active in the field of cultural heritage; (4.4.) HEY4: donating money or other resources to an organisation (a museum, an association, a foundation, etc.) that is active in the field of cultural heritage (conserving monuments and paintings, keeping alive traditions, developing education programmes, etc.).

Measurement of the heritage involvement has been conducted converting the percentages provided in the Special Eurobarometer 466 for each of the above-mentioned variables and sub-variables (at the level of each of the European Union member states) in scores expressed on a scale from 1 (lowest) to 5 (highest), followed by calculating average scores for each sub-variable, aggregating the average sub-variable scores into average scores of the research variables and, finally, aggregating average variable scores in a single average score of the heritage involvement.

### 3. MAIN FINDINGS

The involvement of the European heritage consumers can be assessed as relatively moderate (HER=2.83): the positive experiences registered visiting or attending cultural heritage sites or activities (HXP=4.28) are the main (and, unfortunately, single) driver of this involvement, while discovering (HDS=2.79), exploring (HEX=2.67) and particularly enjoying (HEY=1.57) cultural heritage sites and/or activities are lowering it significantly (see Figure 1). The European heritage consumers seem to have a relatively moderate interest to discover, a similarly limited desire to explore and an even poorer openness to enjoy the cultural heritage. Although getting in touch with cultural heritage sites or activities generates an overall satisfactory experience, the European consumers do not enjoy the heritage by regularly visiting sites or going to events, doing a traditional activity, voluntarily working for or donating money or other resources to an organisation that is active in the field.



**Figure 1.** European heritage consumers involvement in terms of their appetite to discover, explore, experience and enjoy cultural heritage sites and/or activities

The European heritage consumers have a relatively moderate intention to discover cultural heritage sites or activities (HDS=2.79). Monuments and sites, such as palaces, castles, churches, archaeological sites, and gardens (HDS1=3.50), tend to be more interesting by comparison to the works of arts displayed in museums and galleries (HDS2=2.26) or the traditional events or festivals (HDS3=2.21). It could be a matter of significance (as monuments and sites bear an important historical connotation due to their association with well-known or relevant personalities and events), physical evidence (as monuments and sites are more conveniently located and, thus, more easily accessible for the potential visitors) or accessibility (in terms of openness to wider audiences being positioned rather as mass culture objects or activities by comparison to the art works or classical performing arts events that may be perceived as addressing a high-culture audience).

Somehow surprisingly, the European heritage consumer appears to be even less interested to explore (HEX=2.67) the cultural heritage sites or activities they already discovered. Visiting historical monuments and sites (HEX2=3.46), attending traditional events (HEX4=3.11), visiting museums and galleries (HEX3=2.97) and attending traditional or classical performing arts events (HEX7=2.74) are the most frequent, while visiting traditional craft workplaces (HEX5=2.22), visiting libraries or archives (HEX1=2.16) and going to the cinema or film heritage festivals (HEX6=2.01) are the least

frequent ways of exploring the cultural heritage. Besides the overall modest level of exploring the cultural heritage range of sites or activities, the scores express with a reasonable accuracy the perceptions European heritage consumers associate to these ways of exploring cultural heritage: while historical monuments, sites, traditional events, museums, galleries or even some of the traditional or classical performing arts events are perceived as addressing a wider, mass audience, traditional craft workplaces, libraries and archives, cinema and film festivals are perceived as addressing a rather niched public (as having a strong interest in glass blowing, embroidery, pottery or even decorative art, consulting manuscripts, documents and ancient maps or even seeing classic European films produced at least a decade ago may be a feature of a very narrow market segment).

The experiences generated as a result of the discovery and exploration of the cultural heritage have been assessed considering the background provided by the choice, cost of accessing, easiness of accessing, related information and overall quality of the cultural heritage sites and activities interpreted correspondingly as marketing mix elements (product, price, placement, promotion and a synthesis of the personnel, physical evidence and processes). Although less interested to discover and explore cultural heritage, the European consumer has a more than favorable experience (HXP=4.28) visiting sites and attending activities of a very good overall quality (HXP5=4.75), having at disposal a generous (HXP1=4.57) and quite accessible (HXP3=4.46) choice of cultural heritage sites or activities. A certain lack of information (HXP4=3.93) and a relatively high cost (HXP2=3.68) may affect the experience but, in overall terms, experiencing cultural heritage and sites proves to be very satisfactory. The low or relatively low percentages of the consumers indicating lack or limited choice (12 %), remoteness of difficult access (12 %), overall quality (6 %) or even lack or information (25 %) and cost (34 %) as main barriers to experience cultural heritage sites and activities suggests, on a hand, that the real challenge is not to provide a high quality experience but to convince consumers to become interested in having it and, on the other hand, that a high quality experience involves a cost that must be accepted and paid by the heritage consumer.

Discovering, exploring and experiencing cultural heritage sites or activities should be followed by enjoying the heritage in all its forms. Unfortunately, this is not happening as the heritage enjoyment score reveals (HEY=1.57). The relatively low interest in discovering and exploring cultural heritage is not balanced by the positive experience and the European heritage consumers are not inspired enough to regularly visit sites or going to events (HEY1=2.31), doing a traditional activity (HEY2=1.42), donating money (HEY4=1.30) or working as volunteers (HEY3=1.24) for an organisation that is active in the field. Is cultural heritage experience just a one-stop shop experience? For the most part of the European consumers, yes, as with the exception of visiting regularly sites (such as monuments, museums, etc.) or going regularly to cultural events (such as festivals, concerts, etc.), mentioned by 31 % of the European heritage consumers, doing a traditional activity (traditional dancing or singing, playing traditional music, traditional cooking, etc.), donating money or other resources to or working voluntarily for an organisation (a museum, an association, a foundation, etc.) that is active in the field are exceptional behaviors localised at the level of very narrow segments.

#### 4. CONCLUSION

The assessment of the heritage involvement of the European consumer leads to a paradoxical conclusion: although the experience obtained getting in touch with the cultural heritage sites and/or activities appears to be positive, the interest to discover and desire to explore are both modest, while the later enjoyment of this heritage is very low. This, on a hand, confirms that lack of interest and time (mentioned by 37, respectively 34 % of the heritage consumers) are

the main causes of this rather reserved attitude of the European consumers toward the cultural heritage and, on the other hand, indicates the areas in which further efforts to promote and capitalize cultural heritage should be directed: creating and communicating cultural products, services and activities that are appealing for consumers and capable to attract their interest and stimulate their desire to discover, explore, experience and, later, enjoy them.

The results of this exploratory approach should be considered within the limits of the research regarding, first, the considered variables and sub-variables (adaptations in the context of the Special Eurobarometer variables, not covering completely the investigated area but still allowing investigating the involvement of the European heritage consumer), and, second, the measurement of the variables and sub-variables in terms of aggregating the sub-variables, respectively variables scores to generate average heritage discovery, exploration, experience and enjoyment, respectively involvement scores (considering a discussable equal importance of all the involved sub-variables and variables). Still, the results will serve as a base for the future research aiming to improve the definition of the model variables, to measure the impact of heritage discovery, exploration, experience, enjoyment over the involvement of heritage consumer, and to assess the impact of the heritage involvement over the capitalization of the cultural heritage in connection with the sustainable development of the local communities.

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# GLOBALISATION AND ITS AFFECT TO DEVELOPED AND DEVELOPING COUNTRIES, CASE STUDY REPUBLIC OF NORTH MACEDONIA

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**Abstract:** *Globalization is current and inevitable process, which brings good things (like capital flow, technology transfer, export) and some side effects (like pressure on domestic production, interference in economic policy and economic dependence of countries). Accumulation of wealth is one of globalization triggers. Half of world capital is owned by developed countries, while others are fighting to gain better position.*

*Asia has the fastest accumulation of wealth and development. In 2017, China was ranked first economy in the world (considering innovations). It was projected that China's GDP will double by 2020. Qatar is the richest country in the world with the highest living standard and third by resources of natural gas. In the second half of 20th century, Luxemburg is considered financial center. Singapore is also among the richest countries and leader in technological innovation.*

*Globalization led to corporations controlling economies, finances and technology, using developing and postsocialistic countries in accumulation of even bigger wealth. They are big enough to negotiate rules and taxes with smaller countries, and often they build monopol position in these economies. The big corporations come from the developed countries and that is why globalization contributes to wealth accumulation. This triggers the global distribution of industry as well – labour intensive industries in poorer countries, eco-unfriendly technology in less developed countries.*

*In addition, while people in less developed countries are struggling to survive, globalization imposes change of cultural and historical values. Smaller economies spend their resources without any benefit, built bigger public debt; lose jobs, basically they struggle. So intervention is needed by institutions, better management, fight with corruption and criminal. These economies have limited opportunities for increase of production, productivity, and competitiveness and by that economic growth. So they need to work on the export structure with know how transfer and help of the FDI.*

*This paper uses methods as analyses, deduction, induction, synthesis and comparative analyses.*

*In further period, it is expected that the globalization will induce changes in economy and politics and progress. The question how to decrease the gap between poor and rich countries remain.*

**Keywords:** *Developing Countries, Developed Countries, Globalization, Growth.*

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## 1. INTRODUCTION

Globalization is a process of opening towards the world and integration influenced by domination and power. „It is a game of interest at a higher level, a risky and conflicting game.” (Gjegozh, Kolodko, 2004, p. 13). The world is divided into countries that are influenced and countries that are influencers.

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For developed countries, globalization serves in function of modernization, liberalization, economic and political forces. Multinational companies are the ones that subordinate everything to their interests. They promote competition, efficiency, specialization, new ideas, experiences, new methods of organization, but generally, they create the base for inequality. The overall result of globalization is rich becoming richer, and the poor poorer. Corporations are motivated by high profit, affecting resources, transfers, trade and balance of payments, competitive ability.

For developing countries, globalization may be a source of limitation of sovereignty, structural dependence, subordination to the international division of labor, even exploitation. Technology transfer has the largest impact on developing countries. They are accustomed to the macro and micro level to cope with the disloyal competition of developed countries, which are the economically most organized strength of international economic relations. Underdeveloped countries are asked to give up their identity, and each step in the function of development is conditioned. So the question is - what is the benefit of globalization, when the gap between the rich and the poor countries deepens, and the potential profit is moving to foreign countries?

As a post-socialist country, the Republic of Northern Macedonia is interested in more favourable global placement. The country needs a global strategy for production development, trade and financial transactions. The greatest concern remains the corruption, which has great impact on the business climate and investment decisions.

## **2. GLOBALIZATION IN FUNCTION OF GROWTH OF DEVELOPED COUNTRIES**

Global problems give guidance, and those who lead to fulfillment of goals for countries welfare are the priority. They are transferring capital, new technology, new products, increased exports and employment of the population.

In 2017/2016, private wealth increased globally, concentrated in the US, China, Japan, Great Britain, Germany, India, France, Canada, the Netherlands, Australia and Italy. In the political and economic world the countries of the European Union, the United States and the countries of eastern and southeastern Asia remain most influential. According to the UN classification, the happiest people live in Finland, Norway and Denmark. Within its borders, the EU is the creator of economic and social development, the development of foreign trade and partnership in the Union. They have developed economies, their education is at a high level and literacy percentage is 99%.

The US is one of the most influential and powerful countries in the world. It is a big country with numerous and consumerist population, with natural resources, and at the world's top in all industries. It is also the leading country in scientific research. The Silicon Valley has a high technology concentration. The financial sector is also an important branch. The US is the main importer and exporter of goods in the world and main trading partner of many countries. The level of education is lower compared to other developed countries.

China is also a large and rich country with raw materials, metals and energy products. China is also oriented towards economic reforms that are opening this economy to the world. Chinese market economy is very interesting considering the influence of the Communist Party of China. Still it advocates freedom in economic cooperation and is one of the largest producers and consumers in the world. China is world trade leading force, an implementator of new strategies.

Chinese companies are doing acquisition and merge with foreign companies, buying everything that benefits them, but they are clashing with the competition as well.

China's growth is due to the market. However, China achieved the lowest growth in the last three decades in the first quarter of 2019. The result is the Government's effort to settle debt, as well as the effects of the trade war with the United States. This situation has consequences for the global market as well. However, according to Gallup International, most of the inquiries in 2019 consider China as the world economic leader.

India is also big economy, with global economy influence. The secret of its success is cheap labor, natural resources, innovation, software technology, social development through the transformation of society and the formation of institutions that support the market economy.

Russia has clear ideas in its development. It is rich in natural wealth. It is also one of the largest industry in the world. Russia has a huge market and a large increase in the living standard of the population over the past years. It is most likely becoming one of the leading economies in Europe. There are also large multinational corporations' origing from Russia and China.

Qatar is also one of the leading economies in the world. It has 1.7 million inhabitants and large reserves of oil and natural gas. Qatar focuses on the development of technology. In recent years, the country invested in tourism as well. Consumer culture prevails in the country. Unemployment is just 0.1%, and jobs are guaranteed. The education and health care are free services.

Singapore is a rich country in which technology, manufacturing and the financial sector are advancing. It has a stable economy.

Based on prosperity index from 2017 Norway is the richest country, followed by Switzerland, Denmark, New Zealand, Sweden, Canada, Australia, the Netherlands, Finland and Ireland. For the prosperity index, 89 factors were compared, among them GDP per capita, number of employees, how many people feel good in life, and 8 categories were applied: economy, entrepreneurship, education, health, safety, personal freedom, social capital, governance. ([www.biznisvesti.mk](http://www.biznisvesti.mk)).

The number of billionaires in the world increased in 2017. There were 1226 billioners in 58 countries in the world, most of them in US (425), Asia (315), Europe (310), South America (90), and in the Middle East and Africa (86) ([www. Blic.rs](http://www.Blic.rs)). Mostly these are the owners of several telecom and IT networks.

Developed countries have high incomes and a high average life span. In developed countries, unemployment is in small percentage, as well as the level of poverty. The education system is at high level as well. Industry and production are constantly progressing.

The transnational companies, origing from developed countries, were located in their mother countries, until the 1980s. Since the mid 1980s, their production started to be allocated in underdeveloped countries, utilizing local resource and work force, and throught that affecting re-allocation of resources in the world. Their concentration in developed countries has the effect of developing technology, stimulating the development of production and distribution, competing, maximizing profits, under the law of accumulation and having success in the global market.

Large corporations have their own factories, plants, workers, refineries, banks in several countries in the world, whose capital exceeds the power and influence of many countries. They continue to conquer new markets, enhance competitiveness, control raw materials prices, even influence countries sovereignty and build new rules on the global market. They introduce the vision and structure of production, and by selling their products, they invest themselves in criteria and methods inherent to globalist orientation. The pursuit of profit leads them to wide proportions to the integration processes. They influence the international movement of capital.

Large corporations are widespread throughout the world and control the world economy. There are financial transactions and investment processes, multiplying international activities by trillions of dollars and an economic power in the world. They penetrate into new spaces where they benefit. There is also a combined ownership of a part of the means of production from various countries through the branches of multinational companies. These companies mostly export capital, but also export of goods is maintained. They are a segment of progressive development potentials as they spread the new technique, organization of work and management, ideas, production experience, increased exports, increased accumulation, capacity optimization, international division of labor and international movement of capital, employment. The economic and financial power of large capital is felt everywhere, where consumers' habits and behavior are known.

The basis is profit, because the accumulation law requires them to maximize profits. When they succeed in their own country, only plants around the world ensure the placement of final products. Supply of raw materials and cheap labor, low taxes, and liberal environmental regulations are to be found in underdeveloped countries. The companies from developed countries sell the final products, dictate the competition and make the profit. „For example, in Russia for a long time there is INGOSTRAH which has branches in the United States, Holland, Great Britain, France, Austria, Germany, Armenia, Azerbaijan, Moldova, Latvia, Estonia, Lithuania, Belarus, Ukraine, Turkmenistan, and NAFTA-Moscow has daughter companies in developed western countries. (Sreten Sokic 2003, page 102).

International companies have large impact on regulation – on global frameworks and state legislation as well, including economic and development policy strategies. The prospect of globalization is great economic power of multinational corporations, among which are banks that control the world economy.

The World Economic Forum (WEF) was held in Davos in January 2018, where new strategies were elaborated. President of Serbia Aleksandar Vučić has been in favor of regional cooperation in the function of regional and harmonious development of the region, as well as integration to the European Union. It is known that EU membership requires approximation of the aspiring members economy to the EU economies, to the per capita income, prices, inflation and interest rates. That is why reforms are needed for these countries to get closer to the developed economies. Foreign direct investments are needed as well, that will bring additional capital in countries that have good geostrategic position and cheap but well-trained labor force. Companies from the region are uncompetitive, failing to achieve a critical level of development, and the EU can hardly accept a country with a lower GDP from the least developed member state of the Union.

US President Donald Trump pointed out that the rapid growth of the US economy is in the function of creating better living conditions. There were also some comments at the expense of underdeveloped countries. The rich have reached the ceiling, and the question is whether they will

stop or will continue to be motivated for new and emerging challenges in the world. Motivation for prestige does not disappear even when their natality is continuously decreasing, when they have a greater share of the elderly population.

This year in Davos (2019), it was pointed out that the world economy will increase by 3.5%. Although developed countries have a priority in economic cooperation and they have their own problems, which are still less than those in underdeveloped countries. They have insatiable hunger for capital and their motive is investment in other countries when they derive from economic benefits, among which are: “expanding their economically most profitable business activities; expanding the market with its own products and improving its own position on it; favorable use of natural resources; possibilities of transfer of profit and repatriation of capital; expansion of the raw material and production base; placement of already acquired technology; possibility of extra profit in the long run; acceptance of the principle of taxation of profits and favorable possibilities for reinvestment; legal guarantees to a foreign investor in the legal protection of the invested and created; the expansion of experimental areas for scientific-technical testing and the acquisition of new technology; the use of cheap labor in his own country “(Sreten Sokić, 2003, p. 96).

Developed countries goals are increasing the production, placement and consumerism on the global market.

### **3. GLOBALIZATION AND DEVELOPING COUNTRIES**

Developed countries have negative effects when pushing domestic products into the market and blending in the economic policy of less developed countries, when they create economic dependence and control. Underdeveloped countries are over-indebted, have demographic explosions, unemployment and a large percentage of poor population. In the process of their economic development they merge in the template that multinational companies and international institutions create to cope with globalization process. There are capital squandering and management under other rules, there are speculative transfers that provide quick profits for companies from developed countries, without direct investment in production in underdeveloped countries. They are asked to give up their identity, and for each step they make a number of tasks that they have to fulfill conditions them. All this is in the function of deteriorating living conditions in developing countries, and their historical and systemic heritage, dominant culture and value preference should not be released. This creates a psychological tension with the population, so the question is - what can be the benefit of globalization to them. Their inferior dimension is the operation of the world capital and the mechanism of its reproduction, the policies of financial institutions that have a dominant role, and people are struggling to survive. The gap between the rich and the poor is steadily increasing (82% of the generated capital belongs to 1% of the richest, and half of the world's population is 3.7 billion people struggling to survive), while the super-rich accumulate global wealth.

Developing countries need to know that for their economic recovery they need to have a solid development strategy, with goals in line with their economic, technological and democratic development. They need free trade, as well as foreign direct investments in the function of addressing the problem of poverty, as well as fair distribution. A large number of businesses disappear due to the actions of external competition, which is a dictation of large-scale capital. There is also the effect of global and regional shocks that are causing changes in the global market, which deepen the crisis in developing countries.

Developing countries need to create a new economy, where farming should be focused on other activities with more productivity. Industry development increases employment, attracts modern technology and capital, high productivity and favorable competitiveness in the global market. Exports are developing, they can regulate debts and improve their position in the global market. They need a high degree of processing of export products, as well as in the best way combining the factors of production and modernization of the economy. The countries that have done this have achieved development and are at the top of the world's wealthiest nations: Hong Kong, South Korea, Qatar, Singapore, Luxembourg, Mexico and Brazil. They have strong institutions, a liberalized and open economy, developed infrastructure, quality education and the rule of law.

The development strategy should have a lasting and stable export orientation and linking trade agreements, but also to correct mistakes from the past, orientation for efficient use of human resources and natural resources. In the function of increasing competitiveness in the world market, they should have a national strategy, and for export they should look for new markets and come to foreign investments, which are in function of increasing employment. In a competitive struggle with developed countries, orientation should be towards specific policies, designed reforms should guide the economy. A country that is not competitively capable and unsuccessful should work to increase the quality of its products, productivity, economy, market organization, knowledge, and marketing, to focus on what they know best. Governments should adopt functional strategies that should generate growth. Interest should be their restructuring of the financial sector, which would enable them to solve problems and macroeconomic balance.

Corporate restructuring would solve problems in the company. They should apply international standards, international visions and affirmation of rational decision-making, and produce what consumers want, with an emphasis on the quality of products and services. They should perform their activity successfully and always have a market that verifies their work. They need help and support from developed countries around the world to find ways to help them to accept development messages because poverty, low levels of education, low work qualifications, poor nutrition, an unhygienic environment, and poor housing conditions are difficult to tolerate.

Foreign direct investment should be part of the reforms for economic development and improvement of the international competitiveness of developing countries. In order to achieve this, they should have advanced technology, economies of scale, labor productivity, respect for quality standards, well-developed marketing, high level of processing of export products, servicing, etc. They need to combine production factors, based on natural resources, labor, capital, technology, management and marketing, to work on modernizing the economy, reducing costs and strengthening competitiveness. In poor countries, there is corruption (Somalia, Syria, Libya, Sudan, Iraq, Cambodia, etc.), which affects the quality of healthcare, education and other institutions in the country.

The fact is that the poorest countries are located in areas with a tropical climate, where there are severe living conditions that affect the development of agro-culture, tropical diseases, and high temperatures contribute to the development of parasites, viruses and bacteria. Demographic explosion slows down economic development and does not allow them to meet basic human needs. They are over-indebted, have great unemployment and an expansive type of age structure with young people.



#### 4. REPUBLIC OF NORTH MACEDONIA IN THE PROCESS OF GLOBALIZATION

Globalization exists and is progressing independently of will and multinational companies play a game of interest, they want competition because they have advantages and they succeed everywhere. The Republic of Northern Macedonia is a small country that is fighting for its position on the global market. After independence, the market economy with temptations and difficulties passed. Transformation of ownership, entrepreneurial spirit and free competition were supposed to increase the efforts of businesspersons to modernize production, increase labor productivity and product exports, and improve the standard of living of the population.

Institutions with a new organization were built. "These include the rules relating to WTO trade liberalization, environmental protection standards and policies, accepted from the ON implementation plans, and sanitary standards that are being fulfilled under the WHO protector with the aim of protecting against epidemics." (Gžegož, Kolodko, 2004, p. 27). Reforms in trade liberalization and capital redress have not yielded results; a slow rise in living standards has provoked the discontent of the population. Inflation with declining production has created unemployment and social problems and great internal and external debt.

Although it was aimed at improving the competitiveness of North Macedonian products, there is still limited competitiveness of North Macedonian products and services. Association of companies is aimed at improving the competitiveness of Macedonian products and services. Laws were adopted, institutions were established, liberalization in the foreign trade regime was carried out, quotas for import and export of certain products were abolished, and the level of customs duties was reduced, price liberalization was introduced.

ISO standards for quality of products and services are applied. The tax situation is adjusted to the real situation. Fighting corruption and reducing the gray economy is needed. It should be done on innovations. Insufficient representation of foreign banks is the reason for underdevelopment of the banking sector, which is maintained with high interest rates. Importance is also an effective way of attracting foreign investments in the function of increasing and changing the structure of exports of products with a higher added value. Foreign investment creates a new production image, GDP growth, structural changes in the labor force from agriculture to industry and services.

In the function of foreign investments, the Republic of Northern Macedonia offers advantages: cheap resources, cheap and educated workforce, quality non-metallic reserves, a central place in the Balkans, as well as connection with the European Union markets.

Economy is weak to protect ourselves from external activity, because we are import dependent, we produce products with low degree of finalization, using obsolete technology and low added value. We need open international cooperation, as well as a stable legal system, to learn a lesson for a successful economy. The biggest trading partner are the EU countries. In the second place are the countries of the region.

Coverage of imports by export in foreign trade was: 63,72% in 2011, 61,56% in 2012, 64,94% in 2013, 67,8% in 2014, and 70,15 in 2015 %, 2016 is 70.8% and the first frequent month of 2017 is 73.7%. (CBS: 2012/2013, 2014, 2015, 2016, 2017)

The country has a deficit in exchange with the countries of the region, and there are potentials for increasing foreign trade. The contribution to economic development is the development of regional cooperation. Therefore, the objectives and strategies for each market should be defined and their interdependence envisaged, and expertise should determine the policy, strategy and understanding of the competitiveness factor.

The Republic of Northern Macedonia should continue with the liberalization of foreign trade in the region. It is necessary to increase the trade in agricultural products.

The country's largest company is Okta from the oil business. T-mobile from telecommunications is successful. Companies with a large number of employees and high income are from electrical production, black and non-ferrous metallurgy, pharmacy, construction, etc. For accelerated growth, effective co-operation is important in investing, increasing employment and productivity. Non-trade barriers are a problem for Macedonian exporters, they are not regulated by WTO rules.

Companies should endure competition by selling the best products, to be adapted to world standards, productivity, organization of performance and knowledge. They should monitor economic trends in the world and pay attention to extra-economic factors. For economic development, the quality of education is important.

## **5. CONCLUSION**

The purpose of globalization should be to move towards a better life of all people in the world. However, only a handful of rich countries benefit from globalization (25). There are 20 poor countries in the world (19 African and Afghanistan). The gap between the rich and the poor countries is deepening and questioning their sovereignty and national culture.

Today, in the economic and political fields there is the power of the trinity of developed countries: the countries of the European Union, the countries of eastern and southeastern Asia and the United States.

Of the 10 countries in the world based on all ranking categories in 2017, Norway ranks first (eight years in a row). Next are Switzerland, Denmark, New Zealand, Sweden, Canada, Australia, the Netherlands, Finland and Ireland. At the top of the rich countries are Qatar, Luxembourg and Singapore. The most powerful countries in the world are the United States, Russia, China, England and Germany.

Developing countries are struggling with problems. They have low incomes, and are dependent on prices dictated by developed countries in the world. They are overdue, have a demographic explosion and great unemployment. Economic development imposes a template for a multinational company and an international institution, capitalist capitalism and governance under other rules. Their development strategy should be adapted to the richness, resources, comparative advantages and vision where it wants to develop.

The Republic of Northern Macedonia is a small country that needs to fight for a better position in the global market, improving the competitiveness of products and services. Even today, the cheapest products with low added value are in the export. For economic development, it needs

regional cooperation and to implement a set of reforms for economic liberalization, i.e. open international cooperation, as well as a stable legal system, to learn a lesson for a successful economy.

In order for globalization to make sense, economic development should be in the function of the dignity and equality of all people in the world.

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# SMALL AND MEDIUM-SIZED ENTERPRISES IN THE LABOR MARKET IN THE CONTEXT OF INDUSTRY 4.0

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**Abstract:** *Micro, small and medium enterprises are currently implementing new technologies and are introducing automation in industry, agriculture, construction and other sectors of the economy. Businesses are applying new technologies to their processes in order to increase their competitiveness in the market as well as to use resources more efficiently. In the context of Industry 4 development, SMEs face several obstacles. Our contribution is focused on mapping and identifying these problems and obstacles of micro, small and medium enterprises in the conditions of the Slovak Republic when implementing new technologies in relation to the quality of human resources.*

**Keywords:** *small and medium enterprises, labour market, human resources, Industry 4.0, automation.*

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## 1. INTRODUCTION

Small and medium-sized enterprises form one of the pillars of employment in the Slovak national economy and are therefore an important part of the Slovak economy. They represent a group of companies that cannot be ignored. They account for 99.9% of all enterprises in the Slovak Republic and their share in employment in the SR is 72% (Table 3). Small and medium-sized enterprises play an irreplaceable role, particularly in the area of job creation, the introduction of innovations in economic practice and, in particular, contribute to the balancing of regional development disparities. Small and medium-sized enterprises are characterized by a strong specification, especially above all by the high degree of flexibility and the ability to adapt more quickly to changing market conditions, compared to large enterprises. But even with these facts, they are currently facing a major challenge in the form of Industry 4.0, which has significantly affected the structure of SMEs and the jobs they generate in recent years. The essence of the Fourth Industrial Revolution is to replace manual human labor with robotization, automation. Industry 4.0. can thus be characterized as gradual, fluent changes in technology. It is a logical evolution that creates a new production concept in all businesses, regardless of their size. It is a process that aims to launch a demand for new and modern technologies that accelerate the development of robotics and modern fully automated control systems that are independent of human operators. The essence of the processes is to ensure faster and more efficient production of more accurate, special, reliable and, in particular, cheaper products with an emphasis on better use of material inputs, time, recycling, utilization of renewable resources and ecology.

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When processing the paper, the basic source of information was data obtained from the database of the Statistical Office of the SR, Eurostat and the Slovak Business Agency. Important sources of information were also reports and reviews of major Slovak and European institutions as the Business Alliance of Slovakia. Slovak Business Agency, European Commission reports. Standard scientific methods of investigation were used to process the paper. The contribution is based on the EU definition of small and medium-sized enterprises (table 1).

**Table 1:** Definition of SME

Source: [http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\\_en](http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)

SME Definition				
Enterprise category	Ceilings			
	Staff Headcount (number of persons expressed in annual work units)	Turnover	Or	Balance sheet total
Medium-sized	< 250	≤ € 50 million		≤ € 43 million
Small	< 50	≤ € 10 million		≤ € 10 million
Micro	< 10	≤ € 2 million		≤ € 2 million

## 2. SMALL AND MEDIUM-SIZED ENTERPRISES IN THE LABOR MARKET AND INDUSTRY 4.0 IN THE SLOVAK REPUBLIC

The development of employment and unemployment in the economy is not only a consequence of the causes and factors that operate in the market economy in a given year, but are mainly the result of a wide range of factors from the previous period. These factors affect the economic development of the economy in the future and thus the development of employment and unemployment. At present, the 4th industrial revolution, which substantially changes the structure of the labor market, has a significant impact on the labor market.

**Table 2:** Development of Employment and Unemployment Rate in Slovakia from 2008 to 2018

Source: own processing based on data from the Statistical Office of the Slovak Republic

year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
employment rate (%)	68,8	66,4	64,6	65	65,1	65	65,9	67,7	69,8	71,1	77,4
unemployment rate (%)	9,5	12,0	14,4	13,6	14,0	14,2	13,2	11,5	9,7	8,1	6,6

In the Slovak Republic, we have seen positive developments in employment in recent years and, in particular, a significant decline in unemployment (Table 2). The growth in employment and the decline in the unemployment rate have increased:

- state support for job creation,
- the inflow of foreign investment through which jobs have been created in industry and services,
- political stability, which had an impact on the stability of the Slovak economy,
- business growth.

Within the Slovak Republic, the largest share of jobs created is in services and industry. The smallest share of the employed is in the agricultural sector (table 3).

**Table 3:** Employment rate by economic activity  
in the Slovak Republic in 2017 expressed as a percentage

Source: own processing based on data from the Statistical Office of the Slovak Republic

	agriculture	industry	construction	the shop	service
employment rate in%	3,21 %	27,02 %	9,65 %	11,64 %	48,48 %

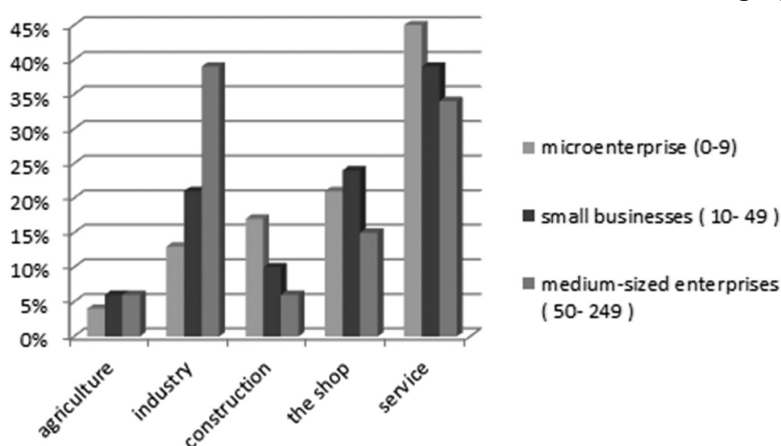
In particular, small and medium-sized enterprises account for a large share of the positive development of employment in the Slovak economy, accounting for up to 72% of total employment. Even micro-enterprises make up 41.9% of all jobs. Thus, they play an important role in employment in the Slovak Republic. Slovak SMEs employ 2.6 people on average, lower than the EU average of 3.9.

**Table 4:** Number of enterprises, number of persons employed in SMEs broken down by number of employees in Slovakia and EU-28 in 2017

Source: SBA Fact Sheet Slovakia, 2018.

Size categories	Number of enterprises			Number of persons employed		
	Slovakia		EU -28	Slovakia		EU-28
	count	part	part	count	part	part
microenterprise (0-9)	550 016	96,9%	93,1%	647 209	41,9%	29,4%
small businesses (10- 49)	14 159	2,5%	5,8%	229 766	14,9%	20,0%
medium-sized enterprises (50- 249)	2 956	0,5%	0,9%	235 023	15,2%	17,0%
SMEs	567 131	99,9 %	99,08%	1 111 998	72,0%	66,4%

The biggest sectors for SMEs in Slovakia are industry and services. Together, both sectors contribute around half of total SME value added and half of total SME employment (figure 1).



**Figure 1:** Sectoral structure of SMEs in Slovakia  
by size categories and adjusted SK NACE classification in 2017  
Source: <http://www.sbagency.sk/stav-maleho-a-stredneho-podnikania>

Ongoing dynamic changes associated with Industry 4.0 in economies largely affect the existence of small and medium-sized enterprises, but especially micro-enterprises. The issue of digitization, robotics, automation and technological innovations has a significant impact on the functioning of businesses that employ less than 10 employees. Official statistics of the Slovak Republic state that such business entities in Slovakia are 96.9%. It is a high proportion of businesses that are directly threatened by Industry 4.0 processes.

Under the influence of the Fourth Industrial Revolution, there will be changes in the labor market. The types of occupations and their structure will change. There will be a shift in qualifications in the labor market. And that is what the industry's biggest pitfalls of Industry 4.0 are seen in lack of skilled labor. Already today, the Slovak labor market has experienced a significant shortage of highly skilled labor for several years. The Slovak labor market currently lacks highly qualified, qualified and low-skilled workers in production and services.

Future business workers will no longer perform heavy manual work, but will oversee the equipment. They will change their job, and certainly a more comfortable working environment [6]. This means that the workforce will need to be reoriented to new types of employment, after which demand will be increased. In the long run, it can be expected that about a fifth of employees will change their jobs outside the area they have originally taught and learned. New job opportunities from automation will require employees with new skills and capabilities they do not currently have. Maxwell [7] explored what skills and qualifications employees should have in future businesses. Maxwell divided them into technical and personal. He further divided them into importance, namely those that employees must have, should have and could have (table 5). Consequently, the improvement of staff qualifications is important and necessary.

**Table 5:** Qualifications and skills of workers in a factory of the future

Source: [https://m.vdi.eu/fileadmin/vdi\\_de/redakteur/karriere\\_bilder/VDI-ASME\\_\\_2015\\_\\_White\\_Paper\\_final.pdf](https://m.vdi.eu/fileadmin/vdi_de/redakteur/karriere_bilder/VDI-ASME__2015__White_Paper_final.pdf),

		<b>Must...</b>	<b>Should...</b>	<b>Could...</b>
		<i>...be included in the skillset of the skilled labor of the future.</i>		
<b>Technical Q&amp;S</b>	IT knowledge and abilities	Knowledge Management	Computer programming/coding abilities	
	Data and information processing and analytics	Interdisciplinary / generic knowledge about technologies and organizations	Specialized knowledge about technologies	
	Statistical knowledge	Specialized knowledge of manufacturing activities and processes	Awareness for ergonomics	
	Organizational and processual understanding	Awareness for IT security and data protection	Understanding of legal affairs	
	Ability to interact with modern interfaces (human-machine / human-robot)			
<b>Personal Q&amp;S</b>	Self- and time management	Trust in new technologies		
	Adaptability and ability to change	Mindset for continuous improvement and lifelong learning		
	Team working abilities			
	Social skills			
	Communication skills			

Since Industry 4.0 is an irreversible process, it is necessary to respond to the situation and prepare people for the job market for new jobs that will require creative, technical, professional and analytical skills from people. The labor market will also require people with a high degree of learning who will have to be able to learn continually to stay busy. Especially less skilled people and people with low digital skills will be at risk in the future labor market. Professions are at risk, and at present, education without GCSE and vocational training, consisting of routine

activities, is sufficient. Many jobs are already replaceable by new technologies today, but due to the high mismatch between labor costs and automation costs, these jobs, especially in SMEs, continue to exist. Replacing people with technology is not going to be bursting, but it will also take place gradually in individual micro, small and medium-sized enterprises as long as they want to remain competitive. Digitization and robotics are irreversible and unstoppable processes in the economy that bring both positive and negative effects.

Industry 4.0 benefits for SMEs and the labor market:

- increased competitiveness,
- cost reduction, low stock levels,
- reduce production time,
- flexible responses to demand fluctuations,
- process optimization,
- increasing the use of renewable resources,
- improving quality,
- simplify order processing,
- reducing waste and waste in production,
- digitizing paper documents,
- real-time monitoring,
- better working conditions,
- better communication options,
- creation of new job positions,
- promoting talent and developing creativity,
- developing digitization skills and competences.

Risks of Industry 4.0 for SMEs and the labor market:

- risks associated with terrorism, hacker attacks,
- data security, protection of sensitive information,
- virus protection,
- loss of high-paid jobs,
- systematic lack of experience,
- extinction of professions,
- increasing the unemployment of people with low digital skills,
- lack of specialists.

### 3. CONCLUSION

Micro, small and medium-sized enterprises have an irreplaceable position in the economy in terms of job creation. Against this background, all aspects of the impact of Industry 4.0 on SMEs and job creation need to be considered and evaluated. It is already clear that digitization and automation will put an end to the jobs that SMEs have created because they will replace people's jobs. But even so, they will have a significant position in the economy in terms of job creation and the creation of innovative ideas in the fourth industrial revolution. Paradoxically, the process of digitization and robotics, which will create new jobs, will also contribute to this. Nevertheless, it is assumed that new jobs will be created more slowly than disappear. Thus, twice as many jobs cease to exist over time. These phenomena will also significantly affect the labor market situation. In particular, Industry 4.0 will need people with technical education, analytical skills, creative and other skills.

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