

**Emerging Markets Economics and Business.  
Contributions of Young Researchers**

*Proceedings of the 11th International Conference of Doctoral Students  
and Young Researchers*

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FACULTY OF ECONOMIC SCIENCES  
DOCTORAL SCHOOL OF ECONOMIC SCIENCES**

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Conference of Doctoral Students and Young  
Researchers***

No. 8 - December 2020

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## PREFACE

Scientific research in economic sciences currently plays, maybe more than ever, an important role in generating solutions and models of economic and social development. Moreover, in the contemporary world, development is inconceivable in the absence of sustained research and development activities. Undoubtedly, scientific research must be conducted primarily in higher education institutions, in academic and research laboratories.

In this context, the scientific research of young people - students, master students and, in particular PhD students - acquires special meanings and its promotion is a duty of honour to academics and supervisors at all levels.

Recognizing and understanding all these realities, in the Faculty of Economic Studies and Doctoral School of Economic Sciences at the University of Oradea, there have been encouraged and supported the efforts and steps on the path of doctoral scientific research. Thus, since 2010 there is organized an Annual Doctoral Symposium of PhD students in Economics and related fields, and papers carefully selected after the peer-review process were published in a volume that encompassed the contributions of PhD students in Economics. This year, the International Conference of Doctoral Students and Young Researchers took place in an online format, being organized in academic partnership with University of Miskolc, Hungary, and with the support of International Business School in Botevgrad, Bulgaria and CCSISEO Association.

Now, we release the 99 papers selected from the scientific contributions of the PhD students, presented at the 2020 edition of the International Doctoral Conference and selected after the review process. The papers deal with topics related to Economics, Finance, Business Administration and related fields.

We release the 8<sup>th</sup> issue of the journal *Emerging Markets Economics and Business. Proceedings of the 11<sup>th</sup> Conference of Doctoral Students and Young Researchers* with the belief that young researchers are, by training and audacity, a tank of opinions, viewpoints, and especially solutions and proposals, and aware that they should be encouraged and promoted as to enable them to confirm the hopes of their teachers and supervisors.

Last but not least, special thanks are due the members of the International Advisory Board and of the Scientific Board, to reviewers, to the members of the organizing committee, and to all generous fellows who supported the International Conference of Doctoral Students and Young Researchers, Symposium held on 20<sup>nd</sup> of November 2020 online at the University of Oradea, and thus made possible the release of this volume.

Oradea, December 2020

President of the Conference,  
Professor Alina Badulescu

# CHANGE MANAGEMENT MODELS FOR ITIL METHODOLOGY IMPLEMENTATION. STUDY CASE ON 10 ROMANIAN COMPANIES

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**Abstract:** *This paper analyses and presents the findings of a multi-case study on five companies which have finished the implementation of ITIL (Information Technology Infrastructure Library). The study was designed to collect data related to which change management model was used for this organizational change and how did the company follow it. All the information is collected in a structured way with the purpose of identify which change management model is the most suitable for the ITIL implementation process. The article consists of 4 sections: introduction, case study design, findings and discussions and conclusion, limitations and recommendations. The main research method involved questionnaires in the organizational environment and the persons involved in this research were part of the ITIL implementation processes.*

**Keywords:** ITIL, change management, methodology, business

**JEL classification:** M15

## **1. Introduction**

According to Gervala (2018), ITIL helps IT departments improve their service quality, including improvement upon project deliverables and time, resource utilization, a decrease in rework, and providing services that meet business, customer, and user demands. The Information Technology Infrastructure Library is a set of concepts for managing IT infrastructure, development, and operations (Jantti, 2015).

ITIL contains 7 core aspects: security management, service support, service delivery, ITC infrastructure management, application management, planning of service management, and business perspective (Gunawan, 2019). The specialty literature offers many Change Management Models which help the companies to implement a change in a much-organized manner, with maximum results.

This research studies if the companies from Romania use a CMM while implementing the ITIL methodology and if so, which is the most used model for this change. The ever-increasing customer demands and the heightened global competition necessitate a re-examination of the role that an improved IT service process plays in creating business value and shaping a firm's competitive capability (Selig, 2016). There are few studies that analyse the process of implementing ITIL within a company, approaching a specific CMM, so this article completes the literature considering this subject.

Researching the literature, it is hard to find a generally accepted definition of change management models, but there are some specific characteristics identified. Change Management Models study the change from two perspectives.

First perspective is related to planned, managed, systematic changes (Burnes, 2004). It is interesting to find out how companies manage, control, and coordinate the processes of change. This model studies both changes from inside and outside of the companies.

The second perspective proposed by the CMM is the companies approach changes with minimum control from the management, especially changes from the socioeconomic domain (Huang, 2013). These changes are produced by different external reasons that cannot be influenced or controlled by the organization.

These both perspectives lead to reactive and proactive actions from the firms.

## 2. Case study design

This case study contains two sections. The first section of the questionnaire covers all company details such as activity domain, number of employees, the role of the person who answered the question and maturity of the organization. It is important to mention that because of confidentiality, the company names are kept private.

The second section of the survey refers to the change management model used for the ITIL implementation process. This section of the study provides a single-choice answer format. There were selected 6 change management models from the specialty literature and added as options, together with a “no change management was used” and an “I don’t know” option. The 6 models offered as answer option are Lewin CMM, Kotter’s 8 steps, 7s-McKinsey, ADKAS, PDCA and Kubler-Ross CMM.

As mentioned in the title, the study case includes 5 companies from different domains of activity. For a better accuracy of the results, the firms needed to have already finished the implementation of ITIL methodology.

The employees that answered the questions were involved, at some point, in the entire process of organizational change: 2 IT Directors, one Service Level Manager and one Project Manager. All of them were contacted via e-mail, the survey was sent and completed online, and in case of clarifications needed, the persons were contacted via phone.

## 3. Findings

This section of the paper will describe the findings of the research and the information will be presented using the same structure as the survey.

### 3.1. About the company

As stated in the previous section, five companies were included in the study case. For confidentiality aspects, the name is kept private and will be replaced with letters. The next table resumes all answers to the questions from this segment of the survey.

**Table 1: Company details**

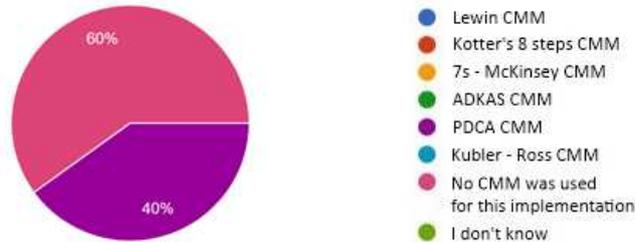
Company	Distribution	Activity domain	Maturity	Employees no.
A	National	Retail	More than 10 years	2000+
B	Multinational	IT	More than 10 years	500-2000
C	Multinational	IT	More than 10 years	2000+
D	National	IT	More than 10 years	100-500
E	Multinational	Automotive	1-5 years	500-2000

### 3.2. Change Management Model used

The second segment of the survey approaches the main focus subject of the paper: does the company follow a change management model when implementing ITIL?

Has a specific Change Management model been used to implement ITIL?

10 answers



**Figure 1.** Change management model

Out of five companies that participated in the study case, three companies implemented the ITIL methodology without following any Change Management Model. It was interesting to find out that two organizations used the PDCA model for this action.

In the need for more detailed information, both company which used the PDCA model for the ITIL implementation were contacted and asked for a short description of how the model was adapted to such a big organizational change.

The PDCA model consists of four steps: Plan, Do, Check, Act.

Both companies had similar approaches.

The first step of the PDCA model constituted in the entire planning of the change, resource allocation, trainings for the project management teams and planning budget.

The second step was the implementation of new processes and functions, with new roles creation, new tools installed, restructure of different teams and departments. Also, a big challenge during this phase was to keep delivering the services and provide support for the customers.

The third step of the PDCA was the "check," part, where every new process implemented and function created was checked directly in production, working in the new environment and setup.

The last part of the PDCA model in the ITIL implementation was the operational part, where the company declared the process finalized.

### 4. Conclusions, limitations and recommendations

The ITIL methodology implementation can be done in many different ways, following different theories, with internal resources or third parties involved. This study highlights that there is a need for change management models for this organizational move and even if the literature offers different options to use in case of a business change, only half of the companies management follow a change management model for it.

A limitation of this paper can be the small number of firms included in the survey. It is interesting to see the statistics in a study with more companies, if there are also other change management models used for the ITIL implementation or if the percentage of organizations not using any CMM increases.

As an idea of a future step, considering that this study is oriented on companies from the private sector, a recommendation could be to include in this study also organizations from the public sector, to get an overview of how ITIL implementation is managed.

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# TRANSFORMATIONAL LEADERSHIP STYLE AND ITS IMPACT ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY: MINISTRY OF EDUCATION IN JORDAN

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**Abstract:** *This study aimed to identify the application of transformational leadership and its impact on organizational performance in the Ministry of Education in Jordan, to achieve the objectives of this study, the researchers designed a questionnaire includes (40) questions; to collect the primary data from the study sample which consists of (90) employees at Ministry of education in Jordan. Researchers have examined whether transformational leadership increases the practices of organizational performance in The ministry of education in Jordan The literature to date appears to demonstrate that there is a strong relationship between transformational leadership and organizational performance in boosting organizations. This conclusion suggests that the effectiveness of organizational performance and transformational leadership must be improved, and future studies should further investigate their role in enhancing transformational leadership in organizations.*

**Keywords:** *Transformational leadership; organizational performance; Idealized Influence; Inspirational Motivation; Individualized Consideration; Intellectual Stimulation.*

**JEL classification:** *L29; M00; M15.*

## **1.Introduction**

The leadership behavior and its effectiveness plays an important role, and is essential in the administrative world, as it is important from the general social system, and the various leadership skills contribute to creating an enjoyable and harmonious administrative climate for all, which helps in the smooth running of the administrative process and achieving its goals, and leadership remains a process that includes a dynamic interaction between individuals and requires that The successful manager has the characteristics and content of leadership skills to enable him to face the administrative problems that hinder him in the administrative and organizational workflow and work to overcome them and address them to serve the desired goals in the administrative work, which enables him to lead the work and the workers As far as poor efficiently and effectively, and that the outcome of the group leadership skills acquired by the successful manager affect directly and effectively in the process of administrative development and interaction of employees in organizations.

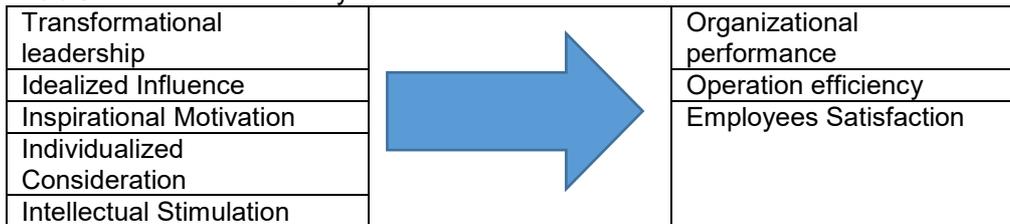
## 2. Hypotheses of the Study

The main hypothesis of the study was built depending on the study problem and its various elements which

Represented in: Ho1: No statistically significant impact at ( $P < 0.05$ ) for the application of transformational leadership on the organizational performance (Operation efficiency, Employees Satisfaction) in the Ministry of educations in Jordan. Derived the following sub-hypotheses: • Ho1.1: No statistically significant impact at a level ( $P < 0.05$ ) for Operation efficiency on the organizational performance in the Ministry of educations in Jordan. • Ho2.1: No statistically significant impact at a level ( $P < 0.05$ ) for Employees Satisfaction on the organizational performance in the Ministry of educations in Jordan.

## 3. Model

**Table 1:** Model of the study



Source: García-Morales, V. J., Jiménez-Barrionuevo, M. M., & Gutiérrez-Gutiérrez, L. (2012). Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of business research*, 65(7), 1040-1050.

## 4. Theoretical Framework

### 4.1 Transformational leadership

Leadership is of great importance in the success of any organization as it is the essence of the administrative process, especially if it finds the competent leader who exercises his role with skill and ingenuity, and tries to choose positive leadership styles that are appropriate to the conditions of administrative work. Fullan, (2011). Leadership is a necessary matter that is necessitated by interactions between individuals and groups. The leader is a watchdog, organizer and directed to individuals in their behavior, and their attitudes towards certain common goals that they aim to achieve without prejudice to public order or law or customs and traditions, and the goal of this group to achieve what you aspire without tampering with Order or disturbing the security of others (Susskind., & Ali, 2014). In the modern era, change and how to lead it successfully has become one of the most important topics that occupy the mindset of administrative leaders, because change occurs everywhere, and that its speed increases and complicates, and that the future of our organizations 'success depends on how leaders can lead change, which is one of the biggest challenges facing Institutions. Educational institutions need educational leaders capable of forming a clear future vision for institutions, and for strategic planning in developing and managing change, and

avoiding crises, to keep pace with modern developments and trends in information and communication technology (Young, 1991).

#### **4.1.1 Transformational leadership concept**

The term transformational leadership (Bass, 1990) has become the basis for studying leadership and has been used mostly to distinguish between management and leadership. The term transformational leadership has appeared by (Burns 1978) in writing leadership, to distinguish between those leaders who build a meaningful and motivational relationship with their subordinates and those leaders who rely extensively on the benefit-sharing process for results. Defined transformational leadership as "a process in which the leader and the followers seek to advance each other to reach the highest levels of motivation and ethics." Transformational leadership seeks to advance the feeling of subordinates by invoking ethical ideas and values such as freedom, justice, equality, peace, and humanity (Bass, 1985). Transformational leadership behavior starts from the leader's values and beliefs and not on the exchange of interests with subordinates. The transformative leader moves in a currency through established value systems such as justice and integrity, Burns is called those values internal values, and internal values are values that cannot be negotiated or exchanged between individuals, and through the expression of these personal criteria, the transformative leader unites followers and can change their beliefs and goals. Burns distinguished between two types of leadership: procedural leadership and transformational leadership. The main principle of the procedural leadership style is the exchange of benefits between the president and the subordinate, where each of them affects the other by that each of the two teams gets something of value. In other words: the president provides the subordinates with something they want to obtain, for example, an increase in rewards, and in return, the president gets things they want, such as increasing productivity, for example (Tichy and Devanna 1990) believe that transformational leadership engages in processes that involve successive steps, including recognizing the need for change, creating a new vision, and making change an institutional business. In a review (House, 1995) of the leadership and change literature that also includes transformational leadership and visionary leadership, he explained that "the majority of models share in general terms the importance of clarifying the vision, expediting the acceptance of group goals, and providing individual support, and that the effective leader seeks to change the basic values and attitudes of the subordinates." Thus, they are prepared to perform at higher levels than those established by the Organization (Podsakoff et al 1996, 260). Bass and Avolio developed a multi-component questionnaire "Multifactor Leadership Questionnaire" based on the theory that transformational leadership includes four dimensions: 1. Idealized Influence: it describes the behavior of the leader who is admired, respected and valued by followers, and this requires participation in the risks of the leader, presenting the needs of the subordinates before the personal needs of the leader, and conducting acts of an ethical nature. 2. Inspirational motivation: This dimension focuses on the behavior and behavior of the leader that raises in the followers a love of challenge, and those behaviors work to clarify the expectations of the subordinates and describe the method of commitment to organizational goals, and the excitement of team spirit through enthusiasm and idealism. 3. Intellectual stimulation: in which the transformative leader works to search for new ideas and

encourage creative problem solving by the followers, and to support new and creative models to do the work.4. Individual consideration: This characteristic appears through the style of the leader who listens gently, and pays special attention to the needs of the followers as well as their achievement through adopting appreciation and complementing strategies.

### **5.1 Transformational Leadership and organizational performance**

Relationship between transformational leadership style and organizational performance has been discussed often. Most research showed that transformational leadership style has a significant relation with organizational performance, and different transformational leadership styles may have a positive correlation or negative correlation with the organizational performance, depending on the variables used by researchers (Lim & Ployhart, 2004). Zhu and Spangler (2005) report that there is a significant relationship between transformational leadership styles and organizational performance. Effective transformational leadership style is seen as a potent source of management development and sustained competitive advantage, transformational leadership style helps the organization to achieve its current objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done. Bass (1997) compares the transformational leadership style with the leading performance in schools and enterprises and found that transformational leadership style had a significantly positive correlation with the organizational performance in both schools and enterprises. Broadly speaking, transformational leadership performance is identical to organizational performance. Business management attributes their successes to transformational leadership efficiency, that is, the transformational leadership style of administrative supervisors has a considerable effect on organizational performance (Bass, 1997).

## **6.Hypothesis test results**

**Table 5:** Result of the Main- Hypothesis

R2	R	Result of the main hypothesis	f SIG	f tabulated	f calculated
0.526	0.725	refuse	0.000	2.72	25.108

Multiple regression test was used, and from computer results in the previous table we found that the value of (f calculated = 25.108) is greater than the tabular value, and since the decision rule is to accept the hypothesis of nihilism (Ho) if the calculated value is less than the tabular value and rejects the hypothesis of nihilism (Ho) if the calculated value greater than the tabular value, and therefore we reject the hypothesis nihilism (Ho), and accept the alternative hypothesis (Ha). This means that the independent variables combined are affecting the organizational performance, and the relation is a strong relationship as R = 0.725 and the independent variables explain 52.6% of Organizational performance.

**The first sub-hypothesis:** there is no statistically significant effect at the level of P <0.05 Operational efficiency of leadership in the Ministry of education in Jordan.

**Table 6:** Result of the First- Hypothesis

R2	R	The first sub-hypothesis	f SIG	f tabulated	f calculated
0.347	0.589	refuse	0.000	1.9939	6.096

Simple regression test was used, and from computer results in the previous table we found that the value of (t calculated = 6.096) is greater than the tabular value, and since the decision rule is to accept the hypothesis of nihilism (Ho) if the calculated value is less than the tabular value and rejects the hypothesis of nihilism (Ho) if the calculated value greater than the tabular value, and therefore we reject the hypothesis nihilism (Ho), and accept the alternative hypothesis (Ha). This means that Operational efficiency of the Organizational performance and the relation is a moderate relationship as R= 0.589 and the independent variable explains %34.7 of Organizational performance. **The second sub-hypothesis:** there is no statistically significant effect at the level of P <0.05 Employees Satisfaction of leadership in the Ministry of education in Jordan.

**Table 7:** Result of the Second- Hypothesis

R2	R	The second sub-hypothesis	f SIG	t tabulated	t calculated
0.393	0.627	refuse	0.000	1.9939	6.731

Simple regression test was used, and from computer results in the previous table we found that the value of (t calculated = 6.731) is greater than the tabular value, and since the decision rule is to accept the hypothesis of nihilism (Ho) if the calculated value is less than the tabular value and rejects the hypothesis of nihilism (Ho) if the calculated value greater than the tabular value, and therefore we reject the hypothesis nihilism (Ho), and accept the alternative hypothesis (Ha). This means that Employees satisfaction of the Organizational performance and the relation is a moderate relationship as (R = 0.393) and the independent variable explains %62.7 of Organizational performance.

## 7. Conclusions and recommendations

This study has investigated the effect of transformational leadership style on organizational performance in the ministry of education in Jordan, the consequences of this examination do uphold the utilization of transformational leadership to certainly impact organizational performance. Even though this model of leadership practice can be important for shaping outcomes for performance, specific elements of the model—intellectual stimulation and individual consideration—appear to play a substantial role in shaping outcomes. As well as the study found that there were no significant differences between the study sample for the relationship between transformational leadership and organizational performance. Based on the findings of this study the following recommendations are advanced:(1) the leaders should apply transformational leadership styles but with due consideration to the situation and nature of the task assigned for the employees. (2) Efforts should be made by the leader to manage and understand the critical factors that affect organizational performance (Operation efficiency, Employees Satisfaction) to be adopted to address them. (3) the leaders should

study holistically the sub-variables of the transformational leadership styles which may enhance or delay organizational performance and subsequently, adopt the applicability of the transformational leadership style.(4) Delegating authorities to enable administrative leaders to motivate workers and pay attention to forming administrative frameworks to be taken.(5) It would also be beneficial to replicate this study using the same type of organizations but with different performance measures.

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## THE NEED FOR EDUCATION FUNDING

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**Abstract:** *The purpose of this research paper is to address the need to finance Romanian education considering the changes that have occurred or are about to take place in this field, both in terms of providers and beneficiaries of educational services, as well as in terms of the content and material basis inherent in the teaching of new content and teaching methods. Highlighting the changes and linking them to the costs they entail, reveals the need to rethink educational policies regarding a new funding model focused on spending targets and expected results.*

**Keywords:** education, resources, finance, investment, human capital

**JEL classification:** I2

### 1. Introduction

Education, a process carried out in various forms and with various methods and purposes, is present in society's life since ancient times, proving its effectiveness as a builder of attitudes and behaviors, as well as personal, social, and professional skills and acquirements. The individual's personality depends fundamentally on education, with two other factors associated: heredity and the environment, according to the pedagogical theories of Comenius and Pestalozzi onwards.

At the beginning, teaching was organized at home with private teachers, and it was accessible only to wealthy families, precisely because it involved financial, material and human resources that only these families could have. Subsequently, education was institutionalized by the State and began to take place in schools. Later it became even compulsory because, on the one hand, it proved beneficial not only for the individual, but also for society, and on the other hand, because institutionalization allowed the State to control the contents, teaching methods, teachers and, finally, the type of person desirable to society, as the finality of the educational process (Arries).

Regardless of how it was organised and carried out, education involved investments that conditioned the quality of the resources involved in this process, as well as the achievement of the fundamental goals pursued. In many countries (the UK, for example) higher education funding is transferred from the state to students' attribution (Johnes, Johnes, 1994). In such countries, there is a culture among parents that consists of saving money since the birth of the children in order to have the funds needed to access higher education by the time they will grow up. Besides, students receive advantageous loans to support higher education fees, loans that they must repay after graduation and employment. At the same time,

there is a concern in ensuring a system and level of salary for graduates of higher education that is motivating and allows the repayment of the accessed loans. Nowadays the resources needed for quality education are increasingly varied and sophisticated, whether we are talking about human, material or financial resources. The purpose of education in schools is to guarantee the workforce for the future, and this scope requires the school to be one step ahead, the teachers to have forward-looking and creative skills and abilities as well as material resources and the most advanced learning technologies. All of the above implies considerable financial resources.

## **2. Human resources**

Teachers, auxiliary teaching staff, non-teaching staff, pupils, parents and members of the local community are the human resources of an educational establishment. Specifically, the concept refers to staff employed in schools and draws attention to the development and practical use of human resources (Davidoff, Lazarus,2002).

If in the past one teacher per class was enough until the seventh grade, nowadays, there are specialized teachers in each discipline not only starting from secondary school, but even some of the subjects of the primary cycle are taught by specialist teachers. With the diversification of the requirements needed in the labour market, new specializations have appeared, and therefore new disciplines that need specialized teachers. Alongside schools, new related institutions have been set up, such as Children's Palaces, sports schools, after-schools, etc. which were focused on developing children's vocational skills, at the same time taking over some of the family's tasks in preparing lessons and doing homework. Institutions for children with disabilities have also been established in order to meet specific social needs.

Education plays a crucial role in the preparation of human capital and its development. The importance of education is also relevant for A. Krueger who shows that the differences in human capital stock are due to half of the gap between resident's income in the US comparing to the income in developing countries, which leads to the conclusion that this factor is more important than all the other factors together (Krueger, 1968).

We are considering two categories of changes that are required regarding teachers: quantitative changes and qualitative changes.

Quantitative changes refer to a correlation of the demand with the supply of teachers in special fields, this way it wouldn't be a shortage of teachers in some school subjects, in which case we will have to turn to unqualified teachers, as opposed to an overage in other subjects in which case some of them would not be needed any longer. This relation between the demand and the supply can be possible with rigorous planning of the staff needed in education, based on demographic studies at a national and local level.

Qualitative changes target closer recruitment and selection of teachers presently with their adequate scientific and psycho-pedagogical training. To this end, they can implement educational policies and strategies according to the demands of future society.

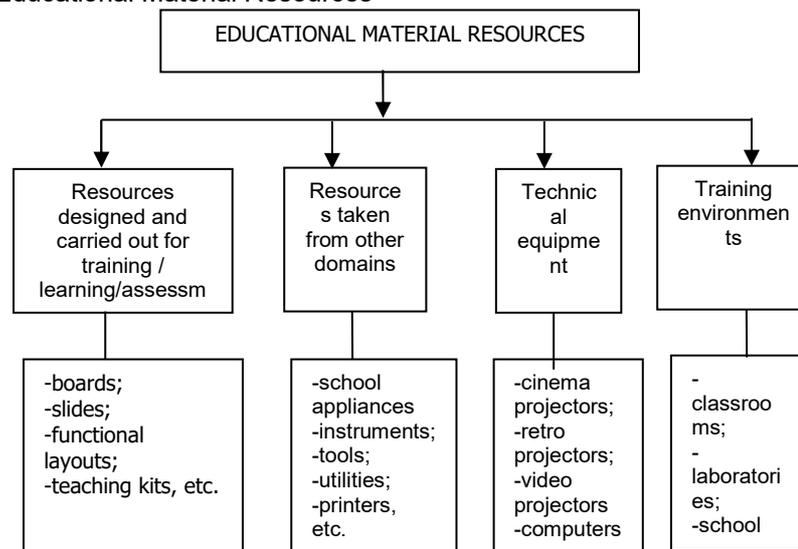
All these needs and their associated institutions require a specialized and motivated human resource to carry out its activity in this field. For this great purpose is essential funding, mainly from the State, starting with initial vocational training, wages and also for continuous vocational training, in order to be up to

date with the latest developments in the activity's field and to update the curriculum to this news.

### 3. Material resources

Along with human resources, material resources are also of major importance in the educational process. From blackboard and chalk, textbooks available for several generations, to computers, tablets, internet, servers, learning platforms, access to online learning resources, cameras, teaching software, etc., these resources become more, better improved, but also more essential.

**Figure 1:** Educational Material Resources



Source: Own processing based on <https://www.academia.edu/>, 27.10.2020

### 4. Financial resources

Nicholas Barr, in his paper, *Higher Education Financing: Lessons from Economic Theory and Reform in England*, pointed out that "education funding faces a clash between technological advances, increased demand for skills and fiscal constraints". (Barr, Nicholas, 2009)

In Romania, according to the Law of National Education (Law No. 1/2011, with subsequent amendments and additions), community education is free and includes *basic funding*, based on the standard cost per pupil, according to which "financial resource follows the *student*", without the additional *instatement* providing capital expenditure, social expenditure and other expenses associated with the state pre-university education process and additional *funding* (funding of national programmes of the Ministry of Education and Research, financing of national social protection programmes, financing of competitions organised for pupils, sports competitions, national and international Olympics, expenditure on the issue of study papers, scholarships for pupils, organisational expenses and conduct of national exams, vocational training, etc.). (Education Act, 2011)

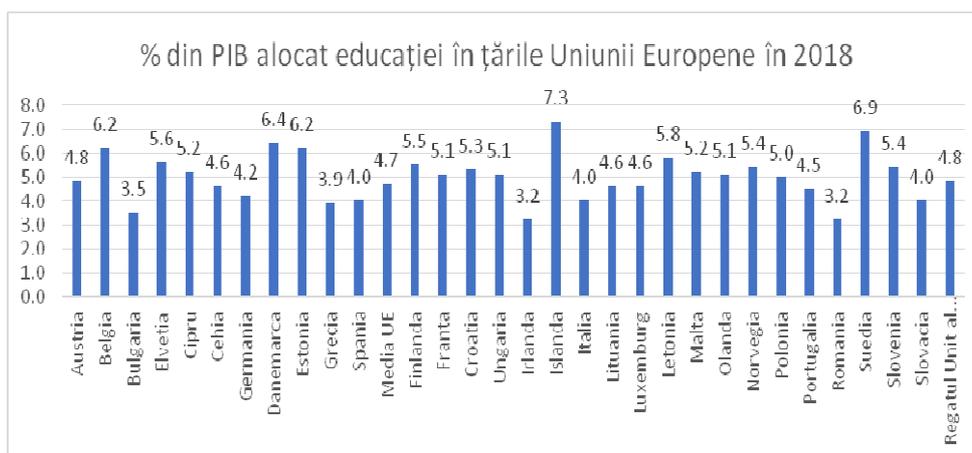
The financing of pre-university education is provided from the state budget and the local budgets: the state budget provides staff costs, increases of any kind, the food norm and contributions to the social security budget, and the administrative-territorial units with material expenditure, expenditure on the staff professional training, social assistance, repairs and investments in educational establishments. In the countries of the European Union, the funding responsibility lies in the school's management, with exceptions where teachers are also involved in decision-making. The full Director's responsibility for financing the educational establishment can be found in countries such as Hungary, Slovakia and Estonia. In England, Slovenia, Belgium, Northern Ireland the responsibility lies in the Director's hands, in Germany, Austria, Scotland and Malta, teachers and the Director are responsible for funding. The only countries where the system financing decisions are not taken at the school level are Romania and Cyprus. The schools' responsibility is related to the operational expenses and the purchase of the technological materials and equipment necessary to carry out the teaching activity (Tuşa, Voinea, Dumitrascu, 2012).

### 5. Investing in education, premise or effect of economic development?

Adam Smith, in "The Wealth of Nations" states that "an educated person by his extraordinary dexterity and skill can be compared to an expensive machine" (Smith, 1962). A 1974 study reveals the correlation between the increase in lifetime earnings and the number of school years (Mincer, Schooling, 1974).

There is no doubt that developed countries provide more consistent funding to education, as presented in the following graph:

**Figure 2:** Percentage of GDP allocated to education in EU countries in 2018



Source: Eurostat, <http://appsso.eurostat.ec.europa.eu> 28.10.2020

It can be observed that countries such as Iceland, Sweden, Belgium, Denmark and Estonia allocate more than 6% of GDP to education, Iceland even 7.3%, followed by Switzerland, Cyprus Finland, France, Croatia Hungary, Latvia, Malta, the Netherlands, Norway, Poland and Slovenia, countries where education funding

represents more than 5% of GDP, therefore above the European average of 4.7%. The level of the rest of the countries corresponds to the European average or even lower, Romania allocating only 3.2%, the same as Ireland.

However, there is also an emphasis on the economic effects of quality education, and this has been demonstrated by numerous studies (...).

The relationship between education and economic growth is going in two-ways: education ↔ growth

In these circumstances, the question is *what should we start with?* With sustained economic growth which, in turn, allows for a consistent investment or with a major investment in education leading to economic growth. Some theories support one or the other of the two alternatives.

In fact, there must be a perpetual balance, flexibility and adaptation of educational and economic policies, a correlation of them so that the two wishes can be achieved.

## 6. Conclusions

Education, to a greater extent than other fields of activity, is under pressure and needs a change, which is the reason why it is constantly looking for solutions that could make possible the preparation of the present generation for the demands of the future. The anticipatory nature of education involves creativity and innovation both curricular and methodologically. This can be achievable with a solid initial training of teachers, conjunctively with continuous vocational training with the help of material, financial, informational and methodological resources.

Government policies face the dilemma of increasing spending on education, versus allocating funds for several punctual and imminent problems. Investing in education shows its effects in a long period of time and it should not be lost from sight of this reason. The future of a nation depends on the quality of education, and quality education requires expensive resources.

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## THE TOURISM ECONOMY AND THE IMPACT OF THE DEVELOPMENT OF URBAN CULTURAL TOURISM

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**Abstract:** *The article proposes a brief conceptual analysis of urban cultural tourism and how this form of tourism is in full process of affirmation, given that, in recent years many cities search to find a new identity for themselves, to gain international recognition through tourism. The methodology used includes bibliographic documentation for deepening the concept of urban tourism, and of the way it developed in urban centers internationally recognized for their performances. The paper explores the shift from 'traditional' cultural tourism toward creative tourism, meant as an evolution of cultural tourism directed toward an engaged and authentic experience, encompassing communities "lifestyle". Cultural tourism market is going to become a serial reproduction of culture. So, the importance of identity and the acquisition of cultural capital in post-modern society points towards the use of creativity as an alternative to 'conventional' cultural tourism.*

**Keywords:** tourism, cultural, urban, historical, city, heritage

**JEL classification:** Z32, Z39

### 1. Introduction

The tourism is considered first of all a recreation form besides other activities and formulas of spending the leisure time (Holloway, 1994).

It implies the temporary move of people through destinations situated outside the regular residence and activities deployed during the time spent at those destinations (Witt, Brooke and Buckley, 1991). In most of the situations, it implies the performance of some expenses with impact upon the economies of the visited areas. Urban tourism and cultural heritage interfere on certain levels by the presence of common elements, such as heritage values which at some point become attractive to tourism. Thus, tourism is based on, and discovers, the heritage values, and the heritage is valued by visiting tourists.

Culture and cultural heritage contribute to territorial vitality, by enhancing local and regional identity and by better protecting cultural heritage.

As an impact of cultural tourism, tourism represents a potential economic lever in the development and planning of a cultural heritage destination, through the financial return achieved, thus leading to a significant increase in production.

In the last period, the touring activity became a strategic factor of economic recovery of some regions and countries, even in the conditions of the economic crisis.

## **2. The benefits of urban tourism**

The urban tourism is one of the main factors of economical increase of cities.

The tourism permits the collection of necessary funds to preserve the natural, archeological and historical monuments, art and cultural traditions and most of all, contributes to the improvement of environment quality (Stanciulescu, 2009).

Urban tourism, if correctly planned, developed and managed, may create advantages and benefits both to urban communities and overall society (Iordache and Cebuc, 2009).

The tourism encourages the development of some new cultural and commercial facilities and improved that can be used both by the residents and the tourists.

Shaw and Williams (1994) argue that the tourism sustains a low cost of the fund for creating new work places, quickens the economical development through powerful multiplying effects, improves the aesthetic ambience of the constructions from the city and intensifies the facility of spending the leisure time for residents.

At local community level, urban cultural tourism plays a particularly important role: in economic terms: increase in revenues in the tourism sector (wages, profits of hotels, restaurants, tour operators) as a result of various expenses incurred by tourists; increasing spending on tourism services on branches producing consumer goods to which tourism firms use; creating new jobs; influencing the use of labor in tourism-related industries; tourism is part of the invisible trade structure;

social: tourism acts, by its nature, on both tourists directly and local residents; tourism is a means of education, raising people is educational, cultural and civilization; tourism is said to be an important means of using leisure time.

The competitive investments in cultural equipments and in touristic infrastructure have a direct impact on the local economy and lead to improvement of living standards. Moreover, urban cultural center is a factor that determines the value of that particular city, which together with other factors like accessibility, tax system, human capital, and stability determines the competitiveness of the city in the global economy (Mariotti, 2012). The spatial organization of a city's cultural resources and the specific infrastructure (hotels, transport, commercial areas) are very important for the success of the development strategy (Lähdesmäki, 2012).

## **3. Cultural tourist**

Globalisation, demographic changes, advancements in technology and a shift in consumers' value systems towards the need for self-development and natural living have shaped demand for a new post-materialistic tourist product.

Experience-based tourism is the new concept that is gradually emerging to cater for this need. It is necessary to go beyond the fruition of the 'fleeting', enlarging the tourist experience in time through an intellectual and emotional involvement able to continue after the fruition and able to stimulate the fixation of the remembrance/memory.

Urban cultural tourism involves experiencing or having contact of differing intensity with the unique social fabric, heritage, and special character of places; moreover, by experiencing wider urban culture the tourist will have a chance to learn about the local community, or will have an opportunity to learn something about the significance of a place and its associations with the local community, that is its heritage (McKercher and du Cros, 2002).

The culture has become one element of the general tourism and leisure product that visitors seek in urban centres. As Claval (1993:133) suggests: ' the meaning attributed to the traditional forms of high culture has changed. What people want is a sophisticated form of recreation and entertainment, rather than the pursuit of a personal achievement'.

One of the most important aspects of the development of international tourism the success is to understand the cultural differences between international tourists and society host. These differences are particularly related to cultural values and to needs and perceptions tourists and hosts. Hosts can consider the products and tourist services they offer provides as satisfactory for tourists, but only in the cultural context of a host society (Reisinger, 2003).

#### **4. Development of urban cultural tourism in Oradea**

As for the tourism cultural sector, Oradea is noted both by the tourist infrastructure of accommodation and food and by cultural-historical tourism objectives

In order to promote and develop tourism in Oradea and the region, the "Association for Tourism promotion in Oradea and Region" and the "Foundation for the Protection of historical Monuments in Bihor County" were established.

In the Integrated Urban Development Strategy of Oradea Municipality (SIDU Oradea), for the time horizon 2017-2023, the vision of the development of the cultural tourism of the city is presented: "Oradea will be included in the European tourist circuit by strengthening the status of a tourist destination with strong historical-cultural and natural values: Oradea - capital of spa tourism in Romania, Oradea - capital of Art Nouveau of Romania and Cetat Oradea - Meridian 0". (SIDU Oradea, 2017).

In the SIDU Oradea, strategic objectives are set: Making better use of the tourist attractions at local level, by improving tourism information, promotion and marketing services; creating new tourist attractions; improving the conditions for cultural and sporting activities; making better use of existing cultural resources and protecting and enhancing the city's heritage through tourism promotion; increasing the number of tourists by 10% by 2023. The objectives are to stimulate and support local, regional and national development through initiatives, activities and measures that increase the number of tourists, develop and promote tourism in Oradea and the region in all its diversity.

#### **5. Conclusion**

For urban cultural tourism development, it is necessary to identify weak points and draw some strategic directions in order to compete effectively with traditional European market.

In the contemporary society, the tourism represents one of the most dynamic economic sectors, which registers permanent exchanges and an ascendant evolution (Minciu, 2005, Badulescu et al., 2012, Badulescu et al., 2014).

The optimal deployment of the touring activities implies a specific demand of goods and services, demand which trains an increase in the sphere of their production. The touring demand determines an adaptation of the offer which materializes, among others, in the development of the technical-material basis development of this sector and, indirectly, in stimulating the production of the participating

branches. Here it is about the multiplying effect of tourism: a touring developed area will always be an attraction point for investors from adjacent sectors. On the contrary, in a globalised world, every city has to take into account its local resources (especially cultural heritage) to promote its image and to gain access to the global competition in a way that respects sustainable development principles.

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## A BRIEF ANALYSIS OF THE JAPANESE CROSS-BORDER M&A BOOM

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**Abstract:** *Japan is still considered one of the world's most powerful countries when it comes to economic development. And although being a very conservative island-country which flourished its culture and tradition over a period of more than 200 years of isolation (Sakoku), the last two decades showed us a large interest from Japanese companies in mergers and acquisitions with Western businesses. After recovering over the mass loses of the World War II, Japan arouse itself as one of the fastest growing markets until the beginning of the '90s, when came the stagnation. And so, public and private companies developed strategies that could at least maintain their place. The domestic market became saturated and that is one of the main reasons for the national companies' interest in going outside the borders to expand in other foreign markets. Still, even though many outbound M&A trades are taking place, most of those are proving themselves as failures after less than 5 years of activity. By this paper, I want to analyze what are the actual drivers of the Japanese companies' interest in cross-border M&As, as well as what are the main reasons for their failure in intercultural partnerships.*

**Keywords:** Japanese market; Japanese economy; Cross-border M&A; competition; economic development.

**JEL Classification:** A13; G34; N15.

### **1. The Main Drivers for Cross-border M&A Expansion**

The purpose of this paper is to analyze the way cross-border M&A activity develops and to further understand what the main drivers for its boom could be. And so, we first have to outline the background of the Japanese economy.

After World War II ended, the Japanese economy had a lot to gain because of the American influence. Starting with the 1960's, as the country had never been rich in natural resources, they needed to find a way to keep up with the other countries. Therefore, the strategy had the same direction as during the Meiji period (1868-1912), "Oitsuke, oikose!" (Catch up and overtake!) (Carter, 2013). In other words, they studied very closely what kind of strategies were the most powerful markets engaged with and tried to do it better. As a result, Japan's overall economy growth exceeded 10% during the first decade, and 5% until the beginning of 1990's, being focused on manufacturing industries. Although still keeping its place in the top three countries on various markets, such as automobile manufacturing, artificial intelligence, robots or even finance, for the last three decades, the Japanese economy maintained a constant pace (Yoshioka and Kawasaki, 2016).

As the number of companies that were established during the prosperous years was huge, after many markets got to saturation, those companies fought a lot for their market share. At the same time, having in mind its fast-aging population, we

can easily make an image of a market where too many economic agents are trying to sell their products to a limited group of customers, who are also very conservative and loyal.

This is why even a good marketing strategy is vital for surviving here. Marketing in Japan does not base itself on advertising, as we may expect when we think of Japan, but the key to catch the customer's eye here is launching new products constantly. A good example here may be the way Nestle's Kit Kat managed to become the biggest competitor on the on the chocolate market in Japan, even though being a foreign company. They understood the Japanese customer's mentality, more exactly their instinct following what the others are doing and their subconscious need of collecting stuff. They are always present on the market with new and unique products, targeting not only locals, but also tourists.

The Japanese customer's response to marketing activity is often compared with a child's behavior, sometimes associated with the "kawaii culture" (Granot, Alejandro and Russell, 2014). This is due to a few features that distinguish them from any other countries:

- They react very fast to colorful, cartooned, and bright ads together with catchy sounds or music and commercials.
- They are inclined to buy and consume a lot.
- They tend to imitate other customers behavior.
- They have a subconscious instinct of collecting objects.
- They are very loyal to what is Japanese and are very reticent to what markets itself as coming from abroad.

Some of those characteristics are specific to the way Japan behaved in international context too, so the cross-border M&A in Japan can be described in the same way. Because at the end of the XX century, market leaders started to acquire or even merge with other Western companies – Western here meaning non-Asian – due to the domestic market saturation. And as they always follow what the bigger ones are doing, even when we speak of competition, for the other companies this seem to be the key for success, and they started to apply the same strategy of expanding, which became a trend in many industries. The reason why, looking from the outside, this may seem to be a child's play is the fact that the M&A is not viewed as a consistent developing strategy, but an activity companies do just because they imitate the top competitors, the way children react in relation with their parents. They are not studying the other countries market deep enough so they can develop a healthy strategy (METI, 2018). The lack of their intercultural comprehension and approach is the reason why most of those outbound acquisitions do not last more than a few years.

## **2. Successful and Unsuccessful Cases**

The 220 years of border closure, keeping away from Western influence, the context in which the country was forced to one the frontiers, and in addition the World War Two outcome and its impact are just some of the drivers that influenced the nation to see other countries and cultures as a threat to national prosperity and welfare. And so, this may suggest why many Japanese developed a superiority complex when placed in an intercultural context. This way of thinking does not apply just for individuals, but for businesses too.

There is a pattern that can be observed in many M&A cases. When a Japanese company acquires another one from a different country, they usually try to buy close to 50% of the company's parts on the first transaction, so that they can have veto power. And because the stiff competition is a factor that drives their will for M&As, in many cases they typically overpay for the foreign companies' shares, compared with their actual value (Okuno and Ishikawa, 2020). Furthermore, there are numerous cases when they do not stop to 50%, they continue to buy other parts up to 100% of the new company's shares, with the purpose of avoiding dealing with other partners. This especially happens because their superiority complex. They know that when in partnership with international collaborators, they need to spend a lot of energy in understanding partners' point of view, whose potential success, and favorable results they tend to deny in many cases.

Because they lack in intercultural understanding and a multicultural approach, the veto power proves to be a two-way-street. In a mutual understanding context, analyzing what the customer from the new market is looking for, it would be a great advantage. Nevertheless, in most cases the contrary often happens. The Japanese new parent-company tries to apply the same strategy they use in Japan (METI, 2018). In other words, they try to sell the same products as they do in Japan, taking the Japanese customer's behavior as a pattern in taking decisions regarding their activity on the new acquired company's market. They may even change the prices relating to their domestic market. In the end, a relevant number of those acquired companies end up sold again to other international businesses.

What we must understand before drawing any conclusions, is that the way Japanese are thinking as individuals and as businesses follow the same path which is a mentality flourished during hundreds of years of history.

### **2.1. Successful Cases**

The most successful M&A cases of a Japanese business outside the country base on a few principles: have a clear strategic vision; adapt to the international environment; embrace change; have a long-term plan (Koshino, 2018). Those successful examples are the ones in which the Japanese company understood that foreign markets are different from the domestic ones and adapted to constant change, studying the new environment constantly.

Big national firms from various domains like Takeda Pharmaceuticals, Canon or Softbank are very successful in their overseas partnerships as a result of deep understanding of what the foreign companies are expecting from this type of M&A transactions.

Renault-Nissan-Mitsubishi is also a good example, where the atypical context in which the first merger took place (Renault and Nissan) affirmed to be their advantage. On the commence of the third millennium Nissan was in the verge of bankruptcy when Renault came to save them, proposing a merger in which each company would possess a percentage of the other (Renault – 43% over Nissan and 15% of Renault). Taking to account the year of the first transaction, the fact that the alliance became enlarged over the years and managed to have one of the biggest market shares of the automobile manufacturing market are the evidence of their success (Naturally Great Traders, Nelly, 2019). The fact that Japanese company did not have veto power and each of the company would take decision only for their national activity are the two reasons which drove the Renault-Nissan-Mitsubishi to be a M&A which can inspire others.

## **2.2. Unsuccessful Cases**

As I already described, an unsuccessful M&A are due to the lack of communication skills, language skills and adaptability, due to the very slow decision-making and the willing of having 100% control and power over the acquired company (METI, 2018).

Some examples of failures would be Toshiba Corporation, which scored 700 billion yen loss after buying Westinghouse Electric Corporation, or Japan Post Holdings Corporation who bought Toll Holdings Corporation from Australia and after less than two years they had almost the same losses as the above example.

Another relevant M&A failure here is Kirin Holdings Corporation who acquired 100% of the Brazilian beer company Schincariol in two parts, just one month apart. This is a classic example where because of the close competition between Kirin Brewery, Asahi Breweries and Suntory Beverage on the Japanese beer market, all three are investing a lot in M&As outside the country, the main driver being the need of keeping up with what the other two are doing. Therefore, when Kirin acquired Schincariol they did not study what were the targeted customers of the already existing brand or what were the beer consumption trends in Brazil. Moreover, they excluded all the past stockholders, and taken 100% management from Japan. After five years, the acquisition proved to be so damaging that losses turned out not only on Kirin Brewery's account, but on the mother-company, Kirin Holdings too. And so, the Brazilian brand was sold to Heineken. (Beverage Daily, Eagle, 2017)

## **3. Threats and Opportunities for Current and Post-pandemic M&A Trades**

For 2020, a decrease in the Japanese cross-border M&A activity was noticed, compared with the last years' numbers. The uncertainty of the current situation makes it hard for any economic agent to draw a growing strategy. Even though one can be sure of its own ascendant path, the potential partner's stability is hard to forecast (Tamura and Smith, 2020).

Most companies focus on redesigning their supply chain and distribution channels or planning ahead for the future changes that this period will bring forth. In some markets the only international transactions happening in present are cases of mergers or acquisitions which were already planned to happen by now. However, compared to other transaction activities, M&As can regain their stability as the economies will recover.

The only industries which benefitted a lot during this time and expanded a lot through the mean of M&A are the domains of financial, telecommunication services, IT and other markets based on virtual and digital activity products. For those, the current situation proved to be prosperous for further investments (Dwyer and Jackson, 2020).

## **4. Conclusion**

The cross-border M&A activity in Japan is closely influenced by lots of factors related to its history, the traditional Japanese way of thinking, or the economic development of the latest decades, which are very specific in comparison with the international trends. The boom of mergers and acquisitions transactions made with foreign company does not necessarily show a good vision of abroad investment

and development, but a very strong urge to keep up with their competitors on the domestic market, imitating each other's actions. There are some cases which can be seen as a good pattern to follow when it comes to cross-border M&A, and the adaptability here is the main factor that can make a difference from failure to success. On the following period the boom that we could see in the past decades will flatten, but some domains will remain engaged with the strategy of abroad investment.

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# EFFECTS OF COVID-19 PANDEMIC ON TOURISM AND HOSPITALITY INDUSTRY. EVIDENCE FROM BUCHAREST STOCK EXCHANGE (ROMANIA)

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**Abstract:** *The aim of this article is to provide an analysis of the short-term effects of the COVID-19 pandemic on companies from the tourism and hospitality sector, namely, companies listed on the Bucharest Stock Exchange of Romania. While the situation of the tourism industry is already known as being severely affected, the conclusions lead us to the idea that at the end of the first semester of 2020, most of the companies did not manage to completely recover, recording high losses profit wise and a negative trend regarding stock prices. Through the research carried out on a sample of 10 companies, the results highlight the significant differences regarding turnover compared to the previous year, the difficulties regarding liquidity and the evolution of share prices. The results of this research can be a starting point for future analysis on the long-term effects of the pandemic in order to develop specific measures for protecting and maintaining tourism active in Romania.*

**Keywords:** Covid-19, Bucharest Stock Exchange, pandemic effects, tourism industry, hospitality industry, Romania.

**JEL classification:** I15; Z30; Z32.

## 1. Introduction

The entire world economy has suffered and undergone drastic changes in a desperate struggle to adapt to the current situation marked by the COVID-19 pandemic. The economic effects began to show on a large scale after the outbreak and did not end once the state of emergency was lifted. The paper analyzes the short-term effects of the coronavirus in tourism and hospitality industry, a sector that was immediately affected after the outbreak, confronted with an unprecedented challenge, causing devastating losses.

Based on the trend of recent years, international tourism was growing at a rate of 6% annually. Forecasts for 2020 predicted that over 1.4 billion people would travel internationally this year, contributing with 3,3% to the global GDP (UNWTO). Eurostat (2019) showed that in the EU, over 13 million people benefit from tourism, 3.6 million people being directly involved in accommodation, travel agencies or air transport. The onset of the pandemic made forecasts for 2020 become unrealistic, causing numbers to plunge and activities to cease. Since tourism is being directly affected by the decisions taken on all regional levels, it shows great instability, and by taking into account the large number of people who are financially dependent on this sector and the context of the pandemic, we can safely say that tourism is one of the most affected sectors of the economy. The global crisis came with a ban on

travel of any form and for any purpose and without knowing when things will get back to normal. (Stephany et Al, 2020)

Fernandes Nuno (2020) studied the economic impact of the coronavirus crisis across industries in 30 countries, trying to provide estimates of the potential global economic costs and GDP fluctuation. The study showed that economies heavily service-oriented and dependent on foreign trade are more negatively affected. For instance, countries like Spain, Portugal and Greece where more than 15% of GDP comes from tourism will suffer more and the spillover effects can be observed throughout the supply chains.

A study conducted by the Employers' Organization of Hotels and Restaurants in Romania (HORA) showed that a decrease of 70% in turnover was registered in the first six months of 2020 compared to 2019, causing a suspension of activity for over 40% of operators.

A survey conducted by Cushman & Wakefield, in partnership with the Federation of the Romanian Hotel Industry (FIHR), among Romanian hoteliers, between April 24 and May 25 2020, concluded that, compared to other hotel markets in Central and Eastern Europe (CEE), Romanian hotels are less dependent on international demand, almost 80% of arrivals being domestic. While this factor will certainly help the market recovery process, the slow anticipated recovery of tourists traveling on business remains a concern.

Romanian hotels have had to change their priorities, focusing on reducing operational and marketing costs. From a human resources perspective, 80% of respondents resorted to the technical unemployment scheme subsidized by the Government to counteract. In general, Romanian hoteliers have taken measures to reduce the number of employees above the CEE average rate, reducing staff by 29%, compared to 24% in the CEE region.

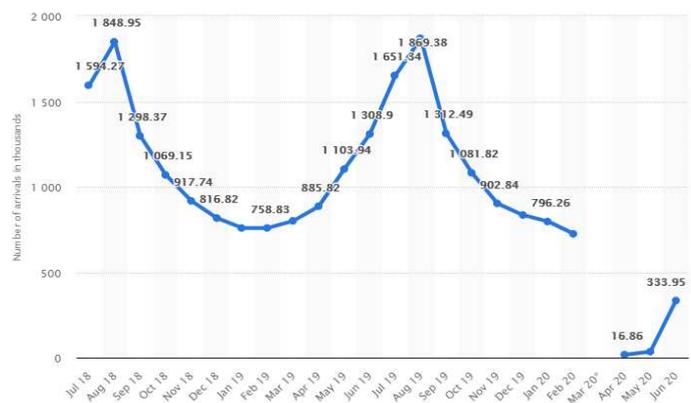
According to a survey conducted by Restograf, comprising of 573 respondents interviewed between 11-22 May 2020, the turnover in the restaurants field decreased, on average, by 83% compared to 2019. Thus, 41.1% say that they registered losses of 100%, 21.9% say that the turnover decreased by 90%, and 9.6% estimate a decrease of 80%.

## **2. Methodology**

The population on which the study was conducted targets 10 economic entities from the tourism and hospitality sector that are listed on BSE. Based on the half-year reports published for 2020, the companies' performance was analyzed by comparing turnover and liquidity to the values registered the previous year; the evolution of the companies' share price was also analyzed in order to show the severe effects of the pandemic. Considering the results, we will try to determine the future evolution of these companies.

## **3. Indicators and interpretation of results**

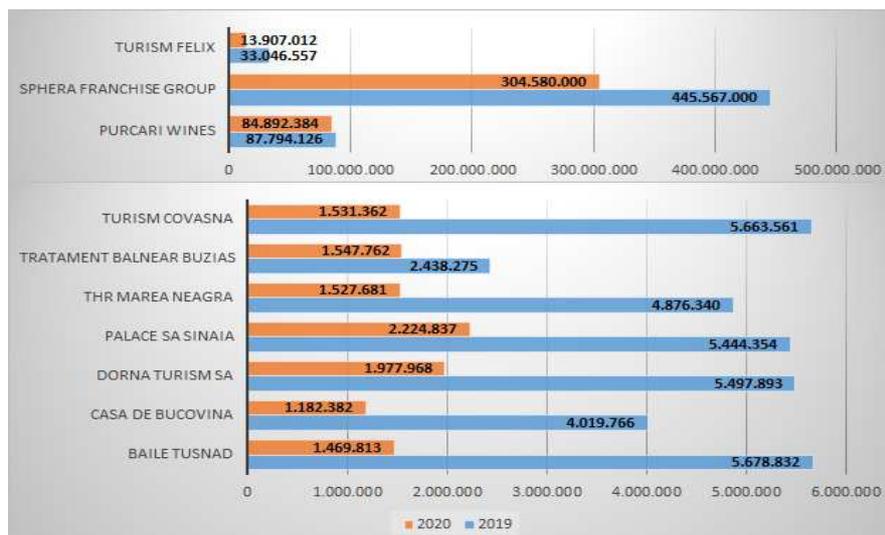
We will start with the following figure regarding the number of monthly arrivals in tourist accommodation in Romania:



**Figure 1:** Number of monthly arrivals in tourist accommodation in Romania from July 2018 to June 2020 (in 1000s) – Figures not available for March 2020  
Source: statista.com

In April 2020, arrivals at accommodation establishments in Romania (including hotels, holiday and other short stay accommodation and camping grounds) fell to around 17 thousand due to the coronavirus (COVID-19) pandemic, down from almost 886 thousand registered in the same period a year before. By June, the number of tourist arrivals in Romanian accommodations increased to around 334 thousand. Arrivals include both residents and non-resident stay in tourist accommodation.

An indicator that measures the performance of companies, used as a criterion for ranking them in terms of their economic importance is the *turnover*. The turnover represents the value of sales made over a period by an entity.



**Figure 2:** Turnover registered in the first semester of 2020 compared to the turnover registered in the first semester of 2019 (LEI)  
Source: Authors' elaboration based on data from BSE - [www.bvb.ro](http://www.bvb.ro)

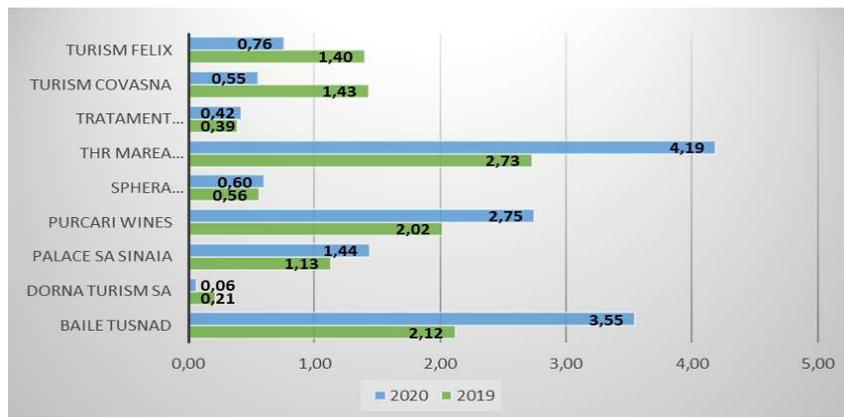
Based on the numbers presented we can conclude that for all the companies, the turnover registered in the first semester of 2020 was lower than the year before. Baile Tusnad had the biggest difference (74.12%), followed by Turism Covasna (72.96%) and Casa de Bucovina (70.59%). The other companies registered values between 50% and 70%. In the case of Sphera Francise Group (which operates the KFC, Pizza Hut and Taco Bell franchises in Romania) the decrease registered was 31.64% and for Purcari Wines, the decrease was only 3.31% - the most affected months were April and May, amid wide blockages in the markets in which the Group operates (Moldova – 49% and China – 70%).

Regarding the operational profit, the comparison between the first semester of 2019 and 2020 is presented in table number 1 below. The companies that managed to record an operating profit in 2020 were THR Marea Neagra, a profit resulting from the sale of assets. The second and last company to record a profit is Purcari Wines, a profit decreased by only 13% compared to the previous year. The biggest loss as well as the biggest comparative difference between the two years was recorded by Sphera Franchise Group (-178%). The loss was due to the very long period in which fast food restaurants were closed. Even though they only worked with delivery services, the negative effects of the coronavirus pandemic are clearly visible. For the other hotel and leisure companies in Romania, the losses registered were significant compared to the previous year. The main factor was their complete closure during March-May 2020 when the state of emergency was instituted. Due to the seasonal character of tourism, a more comprehensive analysis should be carried out at the end of 2020 in order to see the extent to which companies have managed to cover the losses recorded in the first half of the year.

**Table 1:** *The operational profit registered in the first semester of 2020 compared to the operational profit registered in the first semester of 2019 (LEI)*

<b>Company</b>	<b>2019</b>	<b>2020</b>
Baile Tusnad	-831.295	-1.903.156
Casa de Bucovina	169.025	-1.055.646
Dorna Turism	-1.465.312	-1.725.085
Palace Sinaia	-369.693	-581.958
Purcari Wines	25.692.273	22.473.063
Sphera Francise Group	22.797.000	-17.771.000
THR Marea Neagra	-4.200.579	4.533.523
Tratament Balnear Buzias	-1.175.051	-1.331.022
Turism Covasna	-1.503.726	-4.104.813
Turism Felix	-410.568	-8.857.074

Source: Authors' elaboration based on data from BSE - [www.bvb.ro](http://www.bvb.ro)

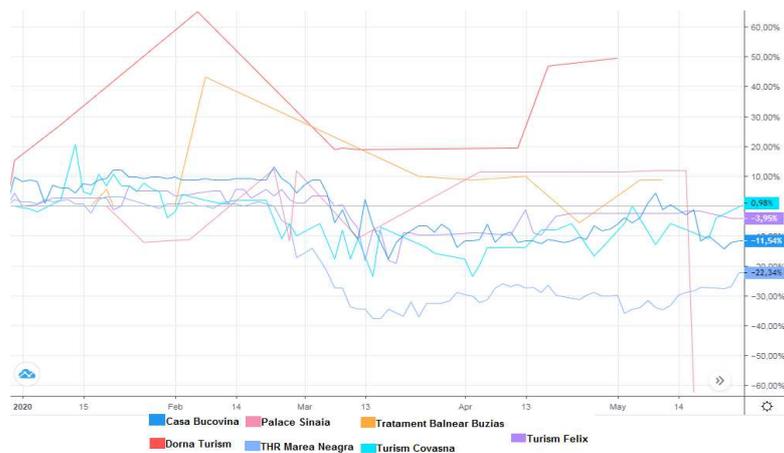


**Figure 3:** Current liquidity registered in the first semester of 2020 compared to the current liquidity registered in the first semester of 2019 (%)

Source: Authors' elaboration based on data from BSE - [www.bvb.ro](http://www.bvb.ro)

Current liquidity is one of the most important financial rates of a company and measures its ability to pay short-term debt using short-term assets. For the present example, the rate was calculated as the ratio between claims and cash available, divided by short-term debts. The recommended value for this indicator is 1, and a value less than 0.8 is a negative signal for the company. First of all, the figure does not include Casa Bucovina, because it registered values of over 20 in both years. The lowest values were recorded by Dorna Turism, Tratament Balnear Buzias and Sphera Francise Group. For 2019, the not mentioned companies registered values of over 1, but in 2020 the values decreased below 1, the effects of the pandemic being visible, reducing the companies' capacity to pay their current debts. It is important to note, however, that companies have tried to maintain the best possible level of liquidity in order to cope with the difficult period.

Regarding the evolution of the share price of the companies under study, it is presented in the following figure.





**Figure 4:** Share price fluctuation for the first semester of 2020 (%)

Source: Authors' elaboration based on data from BSE - [www.bvb.ro](http://www.bvb.ro)

As can be seen, with the outbreak of the pandemic in mid-March, the share price of all companies under study dropped with values between 10% and almost 40%. At the start of June, the share price of most companies recovered, ending with lower values compared to the beginning of the year, between 0% and 25%. THR Marea Neagra and Sphera Francise Group ended the first semester with the biggest difference, meanwhile Purcari Wines, Turism Covasna and Turism Felix recovered almost completely. Exceptions to the above are made by the following companies: Palace Sinaia with a drop of almost 70% in mid-May and Baile Tusnad which had no transactions between January and March. The decrease between December and mid-March is almost 25%, Baile Tusnad ending the first semester with a difference of 9%.

#### 4. Conclusion

The crisis caused by the COVID-19 will influence the travel preferences of tourists, the way tourism is organized and the perception of mobility. The rules that will be imposed on airlines, hotels, events, restaurants or beaches will reduce companies' ability to manage large masses, which will lead to higher prices for these services. The fear of illness, the social distancing measures, as well as the recommendations addressed to citizens raise their level of anxiety, which will delay the availability of exposure.

The huge impact on tourism has destabilized the market. Some travel agencies did not cope with the crisis and went bankrupt, other agencies tried at all costs to maintain their business, which is why they laid off a large number of employees and did not fully or not at all compensate tourists who had booked vacations, so that they managed to stay on the market, but with an affected image (Prideaux et al., 2020).

At a practical level, having at hand the study's findings, local authorities and tourism organizations should develop policy responses to crises and design appropriate recovery strategies. It is very clear that the pandemic has severely affected the activity of companies in the hotel and hospitality industry leading to the

temporary closure of the activity, the registration of significant losses, the decrease of the stock market value and the reduction of their capacity to honor payments. Following other analysis related to other important environmental factors (economic and political environment), marketers must consider the changes in attitudes of tourists and focus on loyalty strategies, more rather than attracting new customers, given that tourism ultimately means a face-to-face relationship and the trust they have in tourism services in the context of the COVID-19 pandemic.

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## THE INFLUENCE OF THE COVID 19 ON THE BET AND WIG20 INDICES. COMPARATIVE ASPECTS

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**Abstract:** *The aim of the paper is to evaluate the short-term impact of the coronavirus outbreak on two stock market indices: BET for Bucharest Stock Exchange and WIG20 for Warsaw Stock Exchange. The consequences of the infectious disease are considerable and have been directly affecting stock markets' performance. By comparing indices evolution during the first 10 months of 2020, as well as analyzing in part the companies that make up the indices portfolio, we will present the sectors most affected by the pandemic as well as their evolution during the analysis period. The results of this research can be a starting point for future analysis on the long-term effects of the pandemic on stock markets' performance for Romania and Poland.*

**Keywords:** *COVID 19, Bucharest Stock Exchange, Warsaw Stock Exchange, financial market, WIG20, BET.*

**JEL classification:** D53; I15.

### 1. Introduction

The economic uncertainty linked to the COVID-19 pandemic has had a severe and wide-ranging impact upon financial markets including stocks, bonds and commodities markets.

The OECD (Organization for Economic Co-operation and Development) points out that businesses in many countries have become highly indebted, while the very low cost of borrowing and accommodative monetary policy have contributed to unprecedented corporate debt issuance. Consequently, corporate debt stands at very high levels in many countries. Also, lower-rated credit issued in the form of bonds, non-investment grade bonds, and leveraged loans has risen to elevated levels, the OECD warns, meaning businesses will have to reduce costs and employment to withstand insolvency pressures.

Helmut Ettl, head of the Austrian financial market authority, said that - there is no reliable empirical data to gauge the ongoing effects of the COVID-19 disease on the economy and the environment, as this type of crisis is unprecedented. Companies that were already financially weak before the crisis are now further destabilized. On 27 February 2020, when the coronavirus outbreak spread outside China, various U.S. stock market indices including the NASDAQ-100, the S&P 500 Index, and the Dow Jones Industrial Average posted their sharpest falls since 2008, with the Dow falling 2,014 points, - its largest one-day drop since the 2008 financial crisis. Stock markets worldwide declined by over 30%, being described as volatile and risky for investors.

## **2. Literature review**

The WHO (World Health Organization) and public health officials performed the role of mediator to communicate the risk of an outbreak to the investors and tried to shape their sentiments towards the disease. (Smith, 2006, pp. 3113-3123)

When the market is trending upwards and there is less perceived risk then investor behaves more optimistically. When the market is trending downwards then investors' sentiments become relatively pessimistic and they will tend to wait to enter the market until a revival begins. (Lu, X.-F.; Lai, K.-K., 2012, pp. 621-629)

Researchers suggest that media coverage also affects the actions of investors, the higher the number of articles relating to unexpected events, the greater the number of withdrawals (Engelberg, J.E.; Parsons, 2011, pp. 67-97). In the case of the coronavirus pandemic, the media was oriented only towards the gravity of the situation feeding the fears of the population.

Globalization has linked economies worldwide and increased the interdependence of global financial markets in recent years. Although globalization brings many significant economic advantages, it also plays an important role during infectious global crises.

Contessi Silvion and De Pace (2020) presented statistical evidence of instability using 18 market indices during November 1, 2019 to May 31, 2020, showing evidence of instability associated with a sudden collapse of stock markets between the beginning of March and the beginning of April.

An important conclusion was formulated by Ramelli and Wagner (2020) who studied the cross-section of stock price reaction to COVID-19 concluding that the largest impact of the epidemic has been on companies with low cash, high refinancing risks and leverage.

## **3. Data and methodology**

The unusual situation developed by the COVID-19 offers the opportunity to assess its impact on the stock markets due to an unforeseen and feared disease. In this paper, we discuss the effects of COVID-19 on countries' stock markets as measured by their leading stock indices for Romania and Poland. Due to the short time span of the virus outbreak, we will analyze the impact on stock market indices performances for the first ten months of 2020. The stock indexes chosen are: BET index for BSE (which includes the 17 most traded companies) and WIG20 index for WSE (which includes shares of 20 major and most liquid companies in the Main List). The data regarding the markets will be collected from the stocks' websites.

## **4. Indices presentation and evolution**

After the first cases were registered in both countries and with the rapid growth in the following weeks, country officials showed great interest towards the financial sector by ensuring continuous access to liquidity, extending reports deadlines and also tax payment deadlines, enabling focus on customer service, providing necessary medical materials and services in order to fight against the ongoing pandemic. The Romanian Capital Market started the year 2020 with a growth of the BET index, reaching its' highest value in the last 12 years in January (over 10,000 points). The optimism of the Romanian stock market started to diminish once the pandemic ceased activity in many sectors of the economy.

The Polish stock market started 2020 with a lower value of WIG20 (approximately 5%). Financial analysts forecasted for 2020 an increase of the main indices as well as the easier obtaining of profit on the small and medium companies' segment. Also, analysts forecasted an 8% increase of the WIG20 index.

In order to analyze the way in which the coronavirus pandemic affected the financial markets in Romania and Poland, the evolution of the indices was compiled and compared for the first ten months of 2020, in order to determine the trend and the future evolution.

According to figure no. 1 below, we can see the steep decline registered by both indices starting from mid-March. The BET index took a drop of almost 30% from 1<sup>st</sup> of January to 23<sup>rd</sup> of March, while WIG20 index decreased with almost 40% during the same period. The current context of COVID-19 has had a direct impact on the evolution of the capital market, presented through the massive depreciation of shares due to investors' fears regarding the pandemic.



**Figure 1:** BET index and WIG20 index evolution between January and October 2020 (BET left axis, WIG20 right axis)

Source: Authors' elaboration based on data from ceicdata.com

At the end of August, the BET index ranked 19th out of a total of 34 countries analyzed (with a difference of 16% compared to the beginning of the year). Out of the total of 17 issuers, 9 companies closed the first seven months of 2020 with a profit. Teraplast was the leader with an increase of over 50% due to the announcement of the sale of business lines, while Nuclearelectrica registered an increase through the generous dividend offered. On the downside, BRD SocGen had the weakest evolution in the index, due to the banking sector being strongly affected by the pandemic. Another company with a significant decrease was Sphera Franchise Group, due to the food industry being severely affected by the current situation. OMV Petrom registered the third weakest evolution with a depreciation of 23.71%. This evolution was also influenced by the sharp drop in the price of oil, which traded at historic lows. Despite the positive situation recorded at the end of August, October came with big depreciations (almost 6% for BET). The banking sector has been hit hard by the deteriorating outlook for economic recovery. BRD SocGen shares fell 12.46%, while Banca Transilvania shares

depreciated by 12.09%. After the banking sector, the shares of Purcari Wineries are in the top of the decreases, the titles of the wine producer from the Republic of Moldova registering a decline of 9.91%. The food industry, to which the company's activity is strongly linked, is being affected by the measures imposed by the authorities to limit the spread of the virus. Shares of Sphera Franchise Group, the other issuer in the index whose operations are dependent on the same industry, depreciated by 7.69% in October, hitting a record low.

In the case of the WIG20 index, the evolution was similar to that of the BET index. In the half-yearly report published on the stock exchange's website, the CEO of WSE noted that: "the dynamic recovery of indices led to the record-high turnover that continued into Q2. The sharp fall of stock prices followed by a strong recovery brought new investors to the capital market. Brokers opened more than 70 thousand new accounts for clients in H1 2020. We expect that most of those new investors will stay on the capital market for good."

Despite the positive situation and the high hopes, the end of October was characterized by a significant decrease similar to the BET index. In terms of trends, as of September 30, 9 companies were on a downward trend, while 10 companies were on an upward trend. The affected sectors are: the banking sector (Alior, mBank, Pekao, Santander), oil-petroleum (Lotos, PKN-Orlen), telecommunications (Orange, Play-Comm.) and insurance (PZU). On October 15, Allegro replaced mBank in the WIG20 index. Just a few days after entering the index, Allegro managed to hold the largest share in the portfolio of the WIG20 index, thus, it finally dethroned CD PROJEKT as the most important company on the WSE. Allegro will also enter the main foreign indices, including those calculated by MSCI and FTSE. Analysts and investors hope that this will lead to the recovery of the Polish stock market.

## **5. Conclusion**

Indices of major stock markets in Europe and the United States marked significant depreciation in October, amid rising numbers of Covid-19 cases, the upcoming presidential election and talks for a new US economic stimulus package or new restrictions on some European countries to limit the spread of the COVID-19 virus. These factors are also present in the evolution of the analyzed BET and WIG20 indices.

From the viewpoint of an investor, the findings of this paper illustrate the importance of not only the company's business factors, but also the investment risks brought on by such a sudden event. The papers results suggest that:

- The COVID-19 outbreak has had a significant negative effect on stock market returns across all affected sectors and stock indices (mostly banking sector, oil-petroleum, food industry, tourism and so on).
- The pandemic had affected companies activity and also had an impact on the employment which will take much longer to recover, destabilizing the market overall (from mid-March, a large number of companies had ceased their activity causing unemployment rates to rise).

As the COVID-19 epidemic still shows a rapid growth, we need to think of not only ways to avoid future public health problems but also financial issues as well. Fears of pandemic and policy measures to control disease transmission have contributed

to a global supply shock, especially in the labor-intensive and manufacturing sector.

Stock prices represent the potential of future earnings, and investors see the pandemic as a dampening economic activity and are concerned about future revenue. Before the severity of the deterioration is evident, normal investors' response would be to sell stocks.

In future studies, the research could be taken on investor sentiment and uncertainty as a framework. The results of the paper would be valuable for institutional and individual investors, fund managers, financial, industrial analysts, and also public health officials (to observe the severity and magnitude of the negative effects upon financial markets).

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# THEORETICAL AND METHODOLOGICAL APPROACHES ON MONEY LAUNDERING

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**Abstract:** *The issue of money laundering as a phenomenon that negatively affects the well-being of the population has been widely debated in prestigious international journals. In order to prevent and combat such phenomenon, it is necessary to look into its roots, to find out its mechanisms and influencing factors and the measures that could be taken to stop cleaning dirty funds. In this paper we have carried out a bibliometric analysis based on literature of money laundering and its related areas. In order to accomplish this, a software tools was used which created maps based on network data. According to these maps, some of the terms with high relevance score in the money laundering studies have been highlighted but also some terms less represented in the research papers.*

**Keywords:** money laundering; anti money laundering; financial crime; bank, map;

**JEL classification:** E26; F36; G28; K14; K42;

## 1. Conceptual aspects

The phenomenon of money laundering is associated with the name of the well-known Al Capone and with the criminal organizations from the beginning of the 20th century that carried out cash intensive businesses like laundries, hence the name of money laundering, in order to hide the origin of money collected from illegal businesses.

The term money laundering was first officially coined in the Watergate affair in 1972, when President Nixon's re-election committee transferred illegally obtained money for campaign funds in Mexico and then transferred it back through Miami companies. (Achim and Borlea, 2019).

In the literature money laundering is reflected as:

- The process by which income stemming from crimes is "cleaned up" through the legal channel (e.g., via bank transactions) and once "cleaned up", the money can then be reinvested in legal activities. (Ardizzi et al, 2015).
- A complex process, which gives an apparent legality to some amounts of money from illegal businesses. (Achim and Borlea, 2020).

Compared to street crimes, money laundering is a modern crime. At times people also refer to it as a victimless crime but the reality is that it is not a crime against a particular individual, but it is a crime against nations, economies government, rule of law and world at large. (Kumar, 2012).

### **1.1. The stages of money laundering**

According to the international bodies, the National Office for the Prevention and Combating of Money Laundering (the Romanian government body) and the authors like Ryder, 2012, Bajrang et al, 2012, Vaithilingam, 2015, the money laundering scheme, regardless of the methods and techniques used or their number, can generally be reduced to three major stages:

- *Placement* is the stage in which the amounts of money obtained from illicit activities are put into circulation, being effectively placed in financial institutions such as banks, investment funds, insurance companies, etc.
- The second stage, *stratification*, involves the separation of illegal funds from their source. This is done by creating totally or partially fictitious financial or commercial transactions, by setting up front companies.
- *Integration*, the third stage, involves the legitimization of funds from crimes by reintroducing them into the legal financial, banking or commercial circuit. The money launderer can now legally invest funds in the real estate, luxury goods or business markets of his choice.

### **1.2. Money laundering techniques**

In her study, Unger, 2017, amply dealt with the techniques and methods used in the money laundering process: the use of the financial system (either the formal ones, like banks or money transfer offices or the informal ones such as 'hawala' ), the physical movement of cash, such as that carried out by cash couriers or shipping containers, which may be described in general terms as 'trade-based money laundering', disguising the origin of criminal money by hiding it in legal exports and imports of goods and services. (B. Unger, 2017)

As for laundering techniques, the well-known and most used are: smurfing and structuring, currency smuggling, travelers' cheques, gambling, casinos, fictitious sales and purchases, shell companies, capital market investments, real state acquisition, trade based money laundering, on-line banking, virtual currencies.

## **2. Bibliometric analysis of money laundering literature**

Money laundering is a relatively recently defined and incriminated global activity, in a continuous dynamic development, the research on this subject covering to a lesser extent the field. In this study we used a systematic approach to investigate the current literature on money laundering.

First of all, we searched Web of science Core Collection for papers that contained "money laundering" as a topic. That search covered a period between 1975-2020 year and the keyword was searched only in articles and proceedings paper. It rendered 1389 findings and from this result a database was made.

Based on this data, we used the VOS viewer software tool to create maps and to view and explore these maps. To create a map, the main steps taken were: choosing the data source - such as the bibliographic data file, choosing the fields - the title and abstract field or just the title or just the abstract, choosing the number of occurrences of terms related to money laundering. The program calculated a relevance score and the most relevant terms, and finally the map was generated. For our study we used a database of 1389 papers related to money laundering, and chose terms with at least 25 occurrences. The map which was created, Figure 1, is based on text data so, according to the authors of this software, general terms





## **ADAPTING TO CLIMATE CHANGE IS A HIGH PRIORITY FOR THE AGRICULTURAL SECTOR**

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**Abstract:** *There is a progressive climate change and a major impact on the agricultural sector. The agricultural and rural development sector of RDA needs to start reacting faster, in order to be prepared to cope with the future climate effects and there is a need to strengthen the resilience and adaptability of the two sub-sectors of RDA, large commercial farms and subsistence farms. Negative meteorological and hydrological events, such as floods and droughts, are the manifestations with the strongest impact on the agricultural sector and the cause of significant volatility in crop yields from one year to another. Climate risks such as droughts can last for weeks or even months, affecting annual agricultural production results. In Romania, agriculture sector contributes every year to GDP by about 6-7%. The agricultural years 2007 and 2012 were considered to be the driest in Romanian agriculture in the last decade, leading to a production at a considerable decrease. Statistics show that, for example, in 2007, when the drought reached a particularly high level, the gross value added in agriculture decreased by 15.3%, and in 2012, the decrease was 21.2%, the drought being one of the major factors that led to the decline in GDP.*

**Keywords:** rural development; agriculture; crops; droughts; climate change

**JEL classification:** Q54

### **1. Introduction**

In order to meet the challenges and to ensure the achievement of water policy objectives according to the "Project for the Protection of Europe's Water Resources" - Blueprint to Safeguard Europe's Water Resources, 2010 - specific tools are needed to improve water management at national level, regional and basin in line with the objectives of the WFD Water Framework Directive. Last but not least, the disaster prevention implementation and management measures are EU Civil Protection Mechanism requirements, which establishes the directions for cooperation, intervention and coordination in emergency situations generated by natural, technological or biological risks (Decision 1313/2013 / EU Parliament and Council on a Union Civil Protection Mechanism) or torrential rains, the number of floods increased in recent decades as a result of climate change.

### **2. Climate change in 2040 horizon time**

In the period 1980-2011, Romania suffered annual losses caused by unfavorable weather conditions amounting to 8,452 million dollars, 0.26% of GDP, of which 34% were related to drought. Climate modeling suggests an intensification of these

trends in the future. A warmer, drier climate, especially during the warmer and more variable months and with a higher probability of occurring these events will cause significant losses to this sector. A recent study carried out in 2014 by the European Commission's Joint Research Center shows that Central and Southern Europe, which includes France, Austria, the Czech Republic, Slovakia, Hungary, Slovenia and Romania, will be the second most affected region in the European Union, due to the decrease of precipitation by about 24.4% during the summer, thus increasing the exposure to the drought phenomenon, the affected areas expanding from 31,000 km<sup>2</sup> / year to 242,000 km<sup>2</sup> / year in 2080, in this case, the losses rising -3% of the region's annual GDP. In this context, policies and measures to prevent the impact on socio-economic activity must be based on integrated and sustainable management of climate, water and soil resources. Also, in the last 20 years, the production of severe floods has intensified, and forecasts show that this trend will continue.

Within the project "Romania: Climate change and low carbon green growth program", a modeling exercise was organized to assess the possible consequences of three different SC scenarios - low, medium and high on the efficiency of different types of crops, in the time horizon of 2040. The model was applied to a number of 12 hydrographic areas in Romania see the map below based on data provided by the National Institute of Hydrology and Water Management and the National Meteorological Administration.

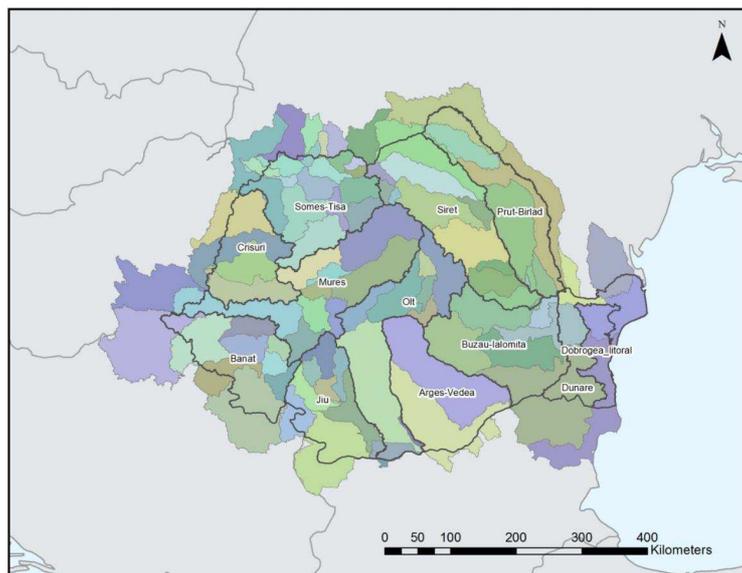


Figure 1:  
Source: World Bank Expert Calculations under "Component C" 20 of the Technical Assistance Project.

### 3. The potential influence of precipitation decrease in agriculture

The model considered the potential influence of precipitation decrease below the average weather scenarios for several crops requiring precipitation, located in 12 hydrographic areas by 2040, see Table 1 below. With the exception of barley, it is

predicted that natural crops, through precipitation, will decrease in all river basins. As rainfall decreases, more and more crops will need irrigation to reduce the risk of variable yields. The most significant increase in water demand for irrigation is forecast for wheat cultivation, reaching + 74-75% in the Olt and Jiu basin, for example.

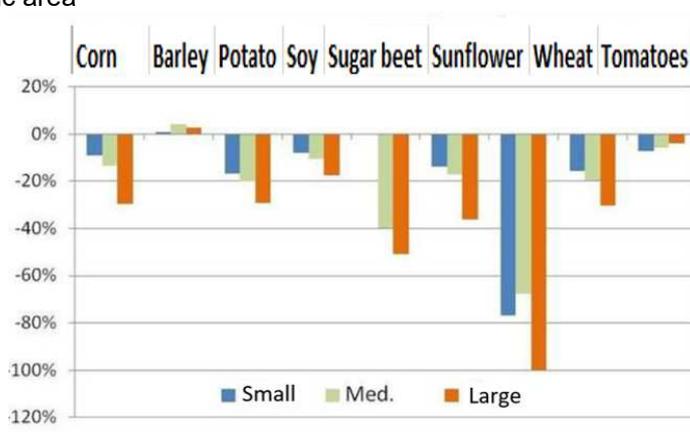
**Table 1:** Possible decrease in rainfall crops by 2040 for the average climate change scenario

Recolta	Bazin hidrogr.											
	Jiu	Prut-Birlad	Olt	Dobrogea-sea coast	Somes-Tisa	Banat	Dunare	Argeş-Vedea	Siret	Buzau-Ialomita	Mures	Crisuři
Corn		1%	8%		9%	5%	-8%	-13%	7%	-9%	11%	7%
Barley	8%	9%	11%	5%	11%	7%	4%	4%	12%	6%	12%	9%
Potato	-17%	-13%	-17%	-16%	-6%	-6%	-17%	-20%	-12%	-18%	-11%	-5%
Soy	-7%	-4%	-4%	-6%	2%	0%	-8%	-10%	-2%	-9%	0%	1%
Sugar beet					-5%	1%		-40%	-13%		-10%	
Sunflower	-9%	-6%	-4%	-8%	0%	-1%	-13%	-17%	-3%	-14%	0%	0%
Wheat	-75%	-60%	-74%	-52%	-32%	-62%	-52%	-68%	-55%	-62%	-67%	-60%
Tomatoes	-13%	-10%	-12%	-15%	-2%	-2%	-18%	-20%	-9%	-18%	-7%	-2%
	-2%	2%	-3%	2%	10%	7%	-1%	-6%	3%	-5%	4%	9%

Source: World Bank Expert Calculations under "Component C" of the Technical Assistance Project.

The decrease in the productivity of naturally cultivated species, with input only from precipitation, is influenced by the potential impact of climate change on yields. The World Bank's modeling team analyzed this potential impact for 9 different cultures, in 3 different scenarios in the Argeş river basin district.

**Table 2:** Productivity of naturally irrigated crops, by precipitation, compared to the current situation percentage change until 2040), three scenarios, Argeş hydrographic area



Source: World Bank experts' calculations of economic modeling component of technical assistance project.

It is obvious that this increase in irrigated crops, compared to the current situation, will have a significant impact on water demand in all 12 river basins by 2040. For certain river basins where demand could increase considerably, this could have an impact from the perspective of reduced water resources and can lead to a conflict between certain priority uses, such as ecological flows and domestic demand.

#### **4. Adaptation policies to avoid over exploitation of water resources**

The increase in water demand for irrigation until the 2040s in the Argeş hydrographic area is expected to be an important event in the scenario regarding low climate change. Adaptation policies are needed to avoid over exploitation of water resources in this watershed and conflict with other destinations or users.

The impacts of climate change can be positive or negative, but the ADR sector in Romania is currently facing predominantly negative impacts. These include:

- a) Changes in agricultural productivity;
- b) Intensification of floods;
- c) Increasing the frequency and intensity of droughts;
- d) Increased risk of soil erosion and desertification;
- e) Low agricultural productivity per hectare;
- f) Intensification of extreme meteorological phenomena and expansion of vulnerable agricultural areas;
- g) Other social and economic costs.

#### **5. Conclusion**

Finally, to briefly present the findings of the impact that climate change could have on water demand for irrigation and agricultural production, crop type and the river basin, it is clear that for most crops the forecast reduction of rainwater is about 10-30% in 2040 and, at the same time, the increase in water demand is forecast to be around 20-60% compared to current conditions. It is clear that if Romania wants to develop a competitive agriculture and to manage water resources in a sustainable way, adaptation objectives and actions related to climate change are needed.

The modeling exercise allowed testing several adaptation measures and also the evaluation of respective consequences on the increase of the yield on one hand, and of the water demand on the other hand. From the productivity perspective, the major improvements will show, according to forecasts after applying larger amounts of fertilizers, but at the same time, this measure will need more water, because there is a close correlation between these two production factors. If the goal is to limit the increase in water demand, the two most effective measures will be the varieties selection, hardy crops and better soil aeration. Overall, these combined adaptation measures will have to find the right balance between agricultural productivity and sustainable water resources management.

Precipitation deficit that will increase in summer months, corroborated with other changes of hydrological cycle, in climate change conditions will have major consequences on water reserve. Overall, the possible consequences of Romania's climate change will significantly increase the risk of partial or total calamity of crops depending on the severity and duration of extreme weather events, as well as reduced financial security of farmers in many regions, especially the south and southeast country.

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## **PUBLIC EXPENDITURE MANAGEMENT IN ROMANIA**

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**Abstract:** *The objective of this article is based on the analysis of the public finance function, the administration of budget revenues corroborated with opportunities to improve the performance of public finances made in order to provide a medium and long-term strategy for public administration development. Along with macro-economic indicators such as the degree of collection of public revenues, budget deficit, public spending is an indicator of analysis in terms of state intervention in the economy. There is currently a complex electronic system that contributes to budget execution, providing real financial data for sound budget management. In this sense, a challenge of the National Agency for Fiscal Administration consists in the performance of revenue collection and the creation of fiscal facilities for taxpayers for the payment of taxes and fees.*

**Keywords:** public expenditures, budget, income, efficiency, public administration, prioritization

**JEL classification:** H10, H60, H61, H63

### **1. Introduction**

Public spending is reflected in the role of the state as a public authority, being borne by its citizens. Public expenditure can be seen as current or future actions based on obligations transposed into present or future payments, the main source of funding being public revenues, especially tax revenues. It follows that public spending depends on public policies but also on resources that include public revenues and debt.

The main features of public spending are: establishing the main collective preferences, making financing and transfers for redistribution of income, are made through the state, the size of spending depends mainly on the economic potential of the state, the ideology of governing parties, how to perceive the population consumption of public goods and services.

### **2. Literature review**

Budget indicators are specific to local government and have the role of measuring financial performance at the level of local budgets. These indicators reflect the financial capacity as well as the budgetary capacity of the local administration, emphasizing the efficiency of financial management at local level (Văcărel, 2003). Afonso Antonio, Werner Ebert, Ludger Schuknecht and Michael Thöne (2005) consider that the level of quality of public finances is determined by the degree and

composition of public expenditures and their financing, which is achieved from public revenues and the budget deficit. At the same time, the authors analyze how public finance performance affects economic growth and its determinants (institutional framework, employment, savings, investment and innovation).

Verena Fritz, Stephanie Sweet, Marijn Verhoeven (2014), in a World Bank analysis, present two interdependent relationships. The first relationship is between the characteristics of a state (economic, demographic, social and political) and public finance management and the second relationship is between the quality of public finance management systems and the expected effects. The characteristics of a state constitute over 40% of the variation in the quality of public finances of that state.

Vasileiou Evangelos (2015) presents the interdependence relationship between the main indicators of governance such as political stability or corruption and performance indicators of public finances. Thus, there are positive effects of economic growth and public revenue growth as well as negative effects of increased public spending as well as increased public debt.

### **3. Public expenditure management and budgetary performance**

Considering the analysis of the specialized literature, it can be said that the main limit existing in Romania is represented by the efficiency of public expenditures. The principles of fiscal policy are correct but not always applied in practice. The classification of public expenditures can be seen from two points of view: Depending on the economic criterion, they can be divided into two categories, namely non-productive expenditures that are reflected in the maintenance of the state apparatus, health, education, culture, etc. and productive expenses.

The main options for a reform are based on a real assessment of the impact of the legislation on the Ministry of Public Finance, which must be carried out responsibly, efficiently and effectively, which is why the costs related to the "expenditure policy" must be differentiated from how they are used.

In order to assess budgetary performance, a number of financial indicators may be used as well as the development of a plan with medium and long-term applicability based mainly on official data provided by public institutions in view of the following objectives:

- a) Maintaining a unitary fiscal discipline, respectively the control of the expenses by establishing some ceilings imposed at the level of the entities.
- b) Allocation of resources according to the priorities established at the central level, which implies an allocative efficiency according to the priorities established at the level of the government as well as according to the ongoing activities at the level of the entities.
- c) Efficiency of services provided. Efficiency in the provision and management of budgetary resources, ie the ability to commit reduced expenditure on services provided.
- d) Aggregate fiscal discipline consists of total control of expenditure based on realistic revenue collection provisions in line with the ability to set and apply tax targets accordingly.
- e) Allocative efficiency that can be identified depending on the level of the entity as well as on the projects, ongoing programs that involve efficient and cost-effective activities.

- f) The technical efficiency of how to spend budgets economically, efficiently and effectively.

#### **4. The principles of fiscal-budgetary policy**

Political issues interfere with fiscal policy and the efficient and effective allocation of budgetary resources and are reflected in the allocation of public funds, which is often affected in the decision-making process by imperfect perceptions of present and future reality. Disciplinary regulations and procedures are needed for debates on budgetary system policies.

The reform of the budgetary system is obviously based on the improvement of the fiscal system, which depends on political and strategic commitments at national level, and principles based on the integrity and universality of the budget are needed.

The principles of fiscal-budgetary policy are the following: the principle of transparency, the principle of stability, the principle of fiscal responsibility, the principle of equity, the principle of efficiency and the principle of efficient evaluation of personnel expenses paid from public funds

The principle of fiscal transparency is based on the transparency of the Government regarding the fiscal aspects and the management of the public debt which should be in line with the main objectives of governance that must be implemented in accordance with the principles of fiscal management. The basis of fiscal transparency should also be reflected in rules that impose explicit sanctions on politicians or public servants who violate budgetary rules. The responsibility of politicians and civil servants is transposed through official duties and in case of incorrect and illegal use of public funds to lead to reward or sanctions. Responsibility can also be seen in terms of accountability to parliament as a budgetary condition as well as in terms of taking on government programs by publishing reports on the work carried out and the results obtained. Given that the legislation in force contains shortcomings in terms of sanctions applicable to politicians / civil servants elected to leadership positions, it implicitly causes a deficiency and a difficulty in implementing the transparency of the budgetary process.

The principle of stability is based on ensuring predictability, maintaining macroeconomic stability and maintaining a low level of unemployment. The principle of stability explicitly reflects the Government's central economic objective of achieving high and stable levels of growth and employment. Applying this principle requires the Government, as far as possible, to operate the policy with a reasonable degree of predictability carried out in a way that ensures the long-term stability and growth of the economy. The Government also has an obligation to conduct fiscal policy prudently in such a way as to manage resources and obligations in order to maintain macroeconomic stability.

The principle of fiscal responsibility presupposes that the Government plans and operates the policy in such a way as to ensure the long-term sustainability and viability of public services, while avoiding a growing fiscal burden or excessive levels of public debt. The Government also has the obligation to conduct fiscal policy prudently and to manage budgetary resources and obligations, as well as fiscal risks in a way that ensures the sustainability of the fiscal position in the medium and long term. The sustainability of public finances means that, in the

medium and long term, the Government will be able to manage risks or unforeseen situations, without having to make significant adjustments to expenditures, revenues or budget deficits with destabilizing effects from an economic or social point of view.

The principle of equity, a term first used in the tax context, when the French Revolution called for the elimination of certain tax advantages for certain categories of people. Specifically, fiscal equity is achieved when taxes and duties are established according to the taxpayers' ability to pay, this being established according to wealth, income, profit, patrimony, etc. In practice, the principle of fiscal equity is frequently debated especially in situations of amendment of legislation in the field and implicitly of the amendment of certain categories of taxes and duties. The effects of these changes are reflected in new ways of covering public spending, given the decline in revenues that implicitly generate both economic and living standards. In conclusion, the principle of equity is achieved by pursuing a fiscal-budgetary policy taking into account the potential financial impact on future generations, as well as the impact on economic development in the medium and long term by analyzing the introduction of tax exemptions for certain categories of users.

The principle of efficiency. Arthur Laffer's theory shows that a high level of taxation inevitably leads to a reduction in tax returns by increasing the taxpayers' inclination towards tax evasion in order to avoid paying taxes and fees to the state budget and thus fraudulently increase revenues / profits. Thus, the "comfortable" taxes generate a better collection compared to the "oppressive" taxes that can generate the increase of the expenses of the public administrations by the need to carry out specialized controls performed in order to combat the criminal phenomena. The Government's fiscal-budgetary policy will be based on the efficient use of limited public resources, through decisions on the allocation of public investments, including those financed from non-reimbursable funds received from the European Union and other donors, based on economic evaluations, as well as on the assessment of absorption capacity.

The efficient management of staff expenditure paid from public funds is reflected in the total expenditure incurred in the budget sector during a budget year. The main expenses are: basic salaries, monthly employment allowances, bonuses, allowances, incentives or other salary rights.

## **5. Conclusion**

The distribution of public expenditures requires knowledge of their classification criteria and their allocation according to public needs. The structure of public expenditures reflects the way in which the financial resources of the state are oriented. Strengthening and developing the financial performance of public finances involves the application of a research methodology that facilitates the identification of factors and causes that explain a particular economic and financial situation. This ensures the necessary premises for the implementation of the best decisions that will lead to the increase of financial performances and, on this basis, to the sustainability of the functional state of the public administration.

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# A LITERATURE REVIEW ON THE RELATIONSHIP BETWEEN ENERGY CONSUMPTION AND ECONOMIC GROWTH

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**Abstract:** *Countries around the world are putting tremendous efforts to resolve the issues surrounding the environment we face today and relying on renewable energy resources seems one of the possible long-run strategies that, from a sustainable development viewpoint, poses an absolute priority. Pushing towards the usage of renewable energy is one of the critical challenges that we should do for our future, we can reduce greenhouse gas emission and decrease energy dependency at the same time, replacing the traditional energy sources with renewable ones, like Hydropower and wind power to produce electricity instead of fossil fuel. This paper serves as a literature review for the relationship between economic growth and energy consumption in its causality and direction. I provide mainly an overview of the latest literature researching the causal effects between energy consumption and economic growth.*

**Keywords:** Economic growth; energy consumption; renewable energies; greenhouse emissions.

**JEL classification:** Q20; O40; O44.

## 1. Introduction

Energy is the essence of modern economies and societies and a significant factor in their development, without energy societies fall. Recently a large concern has been raised upon the environmental problems that come along with energy production that uses fossil fuel, which mainly is the manifestation of greenhouse gas emission along with ozone depletion, global warming, air pollution, and other environmental problems.

This serious issue encouraged many countries including the European Union to act upon finding a replacement that can fit our energy needs and almost harmless to the environment, and at the same time facing the rising energy demand, volatile prices, and disruptions to supply.

This concern results in shifting towards the usage of renewable energy sources, and as we can see from (European Commission, 2014) European Energy Union as they are launching a strategy that "...will ensure secure, affordable and climate-friendly energy for EU citizens and businesses.", "New technologies, energy efficiency measures and renewed infrastructure will help cut household bills, create new jobs and skills and boost growth and exports.", "Europe will become a sustainable, low-carbon and environmentally-friendly economy.

It will lead the way in renewable energy production and the fight against global warming.", also, we can see from the same context that EU has set itself targets for

2020, 2030, and 2050 to reach a reduction of greenhouse gases by 80-95 %, and at least 27% EU energy from renewables.

The energy consumption's growth is the concern of many economists and policymakers as for its importance for societies sustainability and future. Many studies have examined the relationship between energy consumption and economic growth both in developed and developing countries, focusing on multiple periods, variables, and econometric methodologies, mainly regarding the gross domestic product (GDP), CO2 emissions, and other parameters. In the existing study, we cannot find one answer that can define this relationship whether it exists unidirectionally, bidirectionally, or there is no significant relationship between them. However, four types of hypotheses have been categorized based on the previous findings into four main hypothesis considering causality over time, either the relationship is bidirectional (from Energy consumption (EC) to GDP, or GDP to EC), or bidirectional between them, or there is no relationship between them. In this paper, I will just lay out the main finding from different relevant literature related to the topic.

## **2. Literature overview**

Researchers in developed and developing countries have explored the relationship between energy use and economic development, based on different periods, factors, and econometric methodologies, primarily in terms of GDP, CO2 emissions, and other variables. There is not one single answer in the current literature that can characterize this relationship.

(Payne, 2009) outlines several hypotheses that have emerged within the literature testing the relationship between energy consumption and economic growth. These are the 'growth hypothesis', the 'conservation hypothesis', the 'feedback hypothesis,' and the 'neutrality hypothesis.' The growth hypothesis asserts that energy consumption leads to economic growth. Increases in energy consumption result in increased economic growth. In an economy categorized by this hypothesis, energy conservation measures would be expected to hinder growth. In contrast, the conservation hypothesis is found when economic growth leads to energy consumption.

Also, we can see in the literature that Granger causality tests are used to determine the direction of causality between energy consumption and economic growth. These tests are based on (Granger, 1969) are mainly to determine the direction of the relationship between variables. Most of the existing literature use bi or multivariate, analysis to classify economies according to the energy output hypotheses.

However, four types of hypotheses have been categorized based on the previous findings into four main hypothesis considering causality over time.

### **2.1. Growth hypothesis (EC→GDP)**

(Apergis and Payne, 2010) in their study, nine countries have been examined over 25-year time-series data (1980-2005) within a multivariate framework between GDP, energy consumption, the labour force, and real gross fixed capital information and they found that there is a unidirectional causality for both short-run and long-run.

(Ang, 2007) in France over 40 years (1960-2000) between the variables, pollutant emissions, energy consumption, and output, the finding was both for the short-run and long-run.

## **2.2. Conservation hypothesis (GDP→EC)**

(Cheng, 1999) a study in India found that causality runs from economic growth to energy consumption both in the short-run and the long-run.

(Ghosh, 2000) a study in India covering the period (1950–51 to 1996–97) between electricity consumption per capita and Gross Domestic Product (GDP) per capita and the result for the short-run was a unidirectional causality running from economic growth to electricity consumption.

(Lee and Chang, 2007) the relationship between energy consumption per capita (LEC) and real GDP per capita (LRY) in 22 developed (1965–2002) and 18 developing countries (1971–2002) was examined, and the result was a unidirectional causality from LRY to LEC in developing countries only and for the long-run.

## **2.3. Feedback hypothesis (GDP↔EC)**

(Lee and Chang, 2007) the relationship between energy consumption per capita (LEC) and real GDP per capita (LRY) in 22 developed (1965–2002) and 18 developing countries (1971–2002) was examined, and the result was bidirectional causality between LEC and LRY in developed countries only for the long-run.

(Erdal, G., Erdal, H. and Esengün, 2008) This study examined the causal relationship between primary energy consumption (EC) and real Gross National Product (GNP) for Turkey during (1970–2006), and the result was that there is bidirectional causality running from EC to GNP and vice versa for the long-run.

## **2.4. Neutrality hypothesis (EC–GDP)**

(Payne, 2009) The study for the US using annual data from (1949 to 2006) to compare the causal relationship between renewable and non-renewable energy consumption and real GDP, the causality tests reveal the absence of causality between renewable or non-renewable energy consumption and real GDP.

## **3. Conclusions and comments**

This paper aims to provide an overall view of the current literature about the relationship between energy consumption and economic growth. The relationship between the mentioned variable has been studied in different countries with different levels of development and economic characteristics and focus. Using different methods, and in both the short and the long run.

Reading through the previous studies and with the various methods, that were used, we can see a difference in the result, sometimes it is related to the length of time, or the development of the country itself. But mainly, the findings fall under four hypotheses, which were defined as the growth, the conservation, the feedback, and the neutrality hypothesis. The hypotheses are categorized with respect to the direction of the mentioned relationship between the variables, and findings varied across countries and time.

Therefore, we can assume as a hypothesis that the level of a country's GDP might determine whether there is a relationship between GDP and EC in this country. For

instance, a country with a high GDP is more likely to have a higher level of environmental awareness, therefore a well to develop policies promoting renewable energy usage, which will lead to a relationship between the studied variables.

Also, it is reasonable to assume the major industry of a country itself plays a role in the relationship, as an example we can see in some studies like (Lee, 2006) study as the result of the relationship between GDP & EC in 11 major industrialized countries was different between them, although they are developed countries.

Lastly, there are many factors affecting the economic growth that would be really important to integrate them in a future study, to see if the difference in the economic structure and level of development is playing a main or secondary role in how the economy reacts to any change in the energy consumption.

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# THE IMPORTANCE OF GLOBALIZATION ON THE SELECTION OF HUMAN CAPITAL IN BUSINESS AND BASKETBALL

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**Abstract:** *Nowadays, with a continuously growing effect of globalization and multiculturalism in sports and business, basketball coaches and managers job of selecting the right people for their teams has become significantly harder. One of the biggest impacts that globalization has, is that it pushes us to become more adaptable as it affects not only business processes but also people. That is why the purpose of this paper is to show how important it is to be able to adapt to a continuous evolving labor market. The results will give us an insight into how managers and basketball coaches can use globalization to their advantage so that they can improve their human capital selection process, which furthermore will improve their team's efficiency and effectiveness.*

**Key words:** globalization; team building; recruiting; team performance; human resources; human capital;

**JEL classification:** M12, M19

## 1. Introduction

Globalization can be viewed as "one of the most powerful forces to have shaped the post-war world." (Frankel, 2000). Globalization can have a variety of effects on teams (sports or business) such as unique solution finding, improved communication and increase in conflicts. These effects of globalization are visible in every domain: economy, technology, sports, infrastructure etc. In today's economy, companies and basketball clubs alike need to be flexible and adapt their activities according to a continuous changing economic environment.

Furthermore, a differentiation between two similar concepts that have an effect on the selection of human capital needs to be made. Globalization on the one hand focuses on differences between cultures from different countries, while work force diversity focuses on the differences between people from various parts of a country. (Robbins and Judge, 2016). This means that managers and basketball coaches need to adapt their human capital selection processes if they want to remain competitive. More so, the impact of globalization in basketball teams can be seen as the number of foreign players that one club transfers; in business however, globalization is not so visible to the naked eye.

All these aspects underline the importance of a good selection of human capital in business and basketball. In order to "get the right people on the bus" (Collins, 2001) managers and basketball coaches need to understand the importance of globalization and learn to adapt their processes.

## 2. Literature review

With a continuously growing globalization, selection of human capital has become one of the key components in creating efficient business and basketball teams. More so, “when human resources are employed strategically, firms compete more effectively in this new dynamic marketplace” (Kießling and Harvey, 2005). This means, that companies and basketball clubs must expand their areas of searching for human capital in order to obtain the most suited employees. By doing this, managers and basketball coaches could be able to find the best fit for their positions.

One way to become more competitive on the market is to have a well-developed organizational context. Authors Kiessling and Harvey underline the idea that the Human Resources (HR) department needs to move its focus away from “the traditional attracting, selecting and developing individuals to a new focus on developing an organizational context which will attract and develop leaders as well as facilitate teamwork.” (Kiessling and Harvey, 2005). This proves that globalization also has an impact on leadership. By having a well-established organizational context, all the other processes are more easily organized. Furthermore, one of the ways globalization affects leaders and their businesses is through an increase in competition. Companies must be able to adapt to a global market and not only to a local / national one. When talking about competition we need to also take into account how and what other companies are doing in order to attract and retain new employees.

Globalization positively affected the selection of human capital as it broadened the labor market where managers and basketball coaches search for new employees / players. Although, this would mean a longer recruitment process, the chances of finding a better-suited candidate are greater than before. However, this means that companies need to adapt their human resource management (HRM) at an international level. More so, because of globalization, the number of expatriates and international managers has increased, especially in the case of establishing new locations of multinational corporations. That is why it is important to be aware of the impact that globalization has on the selection process as it can help us in finding the best suited candidate for the job or in optimizing the recruitment processes (Sparrow, 2007).

Managing a global workforce is a challenge, that globalization arises for managers and basketball coaches alike. This aspect can be countered through an increase in cultural intelligence or cultural awareness (Robbins P. Stephen and Coulter Mary, 2016). Managers and basketball coaches can develop this cultural intelligence by being aware of its three dimensions as described by Robbins S. and Coulter M. (2016):

- Knowledge of culture as a concept: how cultures vary and how they affect behavior;
- Mindfulness - the ability to pay attention to signals and reactions in different cross-cultural situations;
- Behavioral skills - using one’s knowledge and mindfulness to choose appropriate behaviors in those situations;

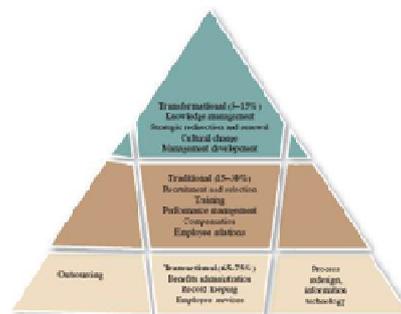
Furthermore, if managers and basketball coaches would have cross-cultural skills and abilities, the benefit that they would bring to the organization would be even greater than by not having them (Robbins S. and Coulter M., 2016). One benefit could be the fact that managers can more easily “read a person” in an interview

and decide if they are a good fit for the team or not. The importance of having cultural intelligence can be underlined through an example from basketball. If a coach would transfer a variety of players from various countries without taking into account their cultural differences, the risk of conflicts in the team could increase. Examples of cultural differences could be regarding (Diamond, 2007):

- Time (being late / early interpreted);
- Trust (in some cultures in business a handshake is sufficient to close the deal, in other however a written agreement needs to be concluded);
- Dietary restrictions (in planning events, corporate or sports, organizers need to take into account if some of the participants do not eat specific things because of the culture they are coming from);

Globalization also has a great effect on communication. On the one hand, in multinational corporations employees and managers must be careful when speaking or writing with their colleagues from different countries because some things can be interpreted differently than it was meant. On the other hand, basketball coaches need to adapt their communication skills according to each player and not use one general communication style. The way a coach gives feedback should be different from player to player in order for the message to be clearly understood. Giving face-to-face feedback is a communication type that is affected by cultural differences (Hiltrop, 1995 cited in Armstrong, 2009). Communication plays an important part in recruiting new employees, as it can be decisive in a candidate's decision to join a company or basketball team. That is why the HR department needs to be viewed as an ambassador of the company. Furthermore, globalization also has an effect on teamwork making it more challenging in the future because teams will be made up of an increased number of teammates who speak different languages and come from various cultures (Dyer et al, 2013). This means that managers and basketball coaches need to focus on the recruitment process in order to be sure that they acquire the most suited employees.

### 3. Globalization and Strategic Human Resource Management (SHRM)



**Figure 1:** Improving HRM Effectiveness

Source: Noe et al, 2016

One of the effects that globalization has on HRM is that it makes it more strategic. HRM has a variety of activities: transactional (eg: benefits administration, record keeping, employee services), traditional (eg: recruitment and selection, training, performance management, compensation, employee relations), transformational

(eg: knowledge management, strategic redirection and renewal, cultural change, management development) (P. Wright et al, 1998). Some of these activities are more time consuming than others. If we look at the image above, we can clearly state that the activities that are most time consuming are at the bottom of the pyramid. This aspect proves that HRM needs to become strategic, efficient and effective. One way to do so is "to free up time and resources to focus more on the higher-value-added transformational work." (Noe et al, 2016). For example, companies can outsource, to other companies regardless of their location, a variety of HR processes such as recruiting for specific jobs, salary payments, document archiving etc. in order to free up more time for other more important activities, one of which being recruitment for important jobs in the company. By transforming their HR processes, companies and basketball clubs enable their managers / coaches to put more focus on the selection process of new employees / players.

#### **4. Conclusions**

The purpose of this paper is to provide an insight into how globalization affects the selection of human capital. Globalization has clearly influenced, and continues to do so, HR departments and their processes. More so, in order to have a well-established selection process, managers and basketball coaches alike need to be aware of the need to understand various cultures. This cultural awareness will further help them in better managing their teams.

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## INTEGRATED MANAGEMENT SYSTEM IN UNIVERSITY LIBRARIES

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**Abstract:** *In the library services, in recent years a new concept has emerged, the concept of ILS - Integrated Library System, which approaches conceptually and practically the entire organization of the library and which leads to increasing the number of services for users and to a better their satisfaction. The purpose of this paper is to obtain conclusions on the theoretical and practical knowledge of the problem of the integrated management system in a university library and to offer methodological and practical-applied solutions, in order to operationalize activities and streamline services. All the more so as the integration of this concept brings essential changes and proves to be a global solution to library problems.*

**Keywords:** quality management, integrated management system, university library

**JEL classification:** M19

### 1. Introduction

Today, in the modern world, competitive relationships are the basis of success. In this sense, quality is a very important factor. The rigors of competitiveness must also be addressed in state institutions, not only in private organizations, which are naturally designed through this prism.

Quality management systems based on international standards are making their presence felt in more and more fields. National private and state organizations, directly or indirectly, must slowly, according to the legislation, comply with the requirements of ISO (International Standardization Organization) standards.

The most important advantage of implementing a quality management system in any of the institutions is that it ensures a clear structure and consistency of a process and the possibility to monitor the activity carried out.

The new challenges for integrated management in this new millennium are constantly growing. Success can only be achieved through a systematic approach to processes. Successful integration of management systems depends essentially on good planning and efficient implementation.

An integrated management system is a logical and systematic managerial approach, which allows for optimal strategic and operational decisions, which take into account all the essential aspects that lead to the efficient functioning of an organization.

The integrated management system presupposes the following opportunities: elements of national legislation and organizational structures that can be developed within integrated management systems, experience in implementing non-integrated management systems, programs related to the process of

accession to the European Union, the existence of extensive offers for training of specialists in the field of management systems

Specific tools for integrated management are: integrated policies and functions, multidimensional objectives, harmonized staff structure, integrated document system (Nisipeanu, 2003).

It is essential for any unit to be aware that the implementation of the ISO 9001 standard is not a remedy, recalling here the opinion of the American scientist J. Juran, a well-known name in quality management: "A high class company can receive the quality system certificate without problems, but this does not mean that the certificate can raise the company to a high class " (Juran, 1951).

There are a multitude of factors that determine the success of an organization that competes to maintain and strengthen its position in a competitive market. An attempt to prioritize them would be difficult, but certainly these factors include the use of techniques and tools that lead to continuous performance improvement, so as to fully meet the requirements of all customers regardless of the field in which the unit operates (Negru, 2010).

**Quality** is the set of characteristics of an entity that gives it the ability to meet expressed or implicit needs (Paraschivescu, 2004). Applying this definition to products, services, it is considered that the quality of the product / service means its ability to perform its functions.

**Quality management** means everything an organization should ensure / accomplish in order for its products and services to meet both customer quality requirements and the requirements of all applicable regulations. Quality management can also be defined as a set of coordinated activities, performed to guide and control an organization in terms of quality.

Some of those who apply the integration system consider the quality system as a "combination of equipment, software, specialists and procedures with a structure so chosen that the objectives deriving from the quality policy can be achieved"

Quality in general, which means the quality of processes and results, is and will always be an important factor of competition, if not the most important.

This quality management can also be successfully implemented in libraries.

## **2. The integrated management system within the libraries: case study at the ULBS Library**

The library, like any other service organization, aims to achieve the set objectives, which are in line with its vision and mission. Based on its potential and local resources, it carries out specific activities, undertakes concrete actions, which reflect the needs of the academic community, in order to meet their information, documentation and research needs.

Over time, as a result of the integration of new technologies in its activities, libraries have undergone a constant evolution. Why did this happen ?, as Coyle (2005) stated "the conditions in the general environment that led to the development of technology are also the conditions in which the library operates" (Coyle, 2005). It is imperative that libraries understand the interaction between user, technology and society in order to plan their further development. In fact, the decision to automate a library is the most important decision in its management.

Libraries can play an important role if they have systems that are able to integrate library services with other services, provided through the core organization and the local network.

An integrated library system is a resource planning system for a library, used for access to documents held, orders, payments, or loans made by users.

The concept of "integration" is very common in the literature. This concept appeared and was imposed over 20 years ago and has become almost synonymous with the notion of "integrated system". In general, the adjective "integrated" applied to a library management system (not necessarily automated) shows that this system is multifunctional and that there are interdependencies between library functions (Banciu, 2007).

The term "integrated" in a library refers to a system in which the necessary information is processed in a main bibliographic file. Genaway extends the definition and describes the system as a common database and two or more operational subsystems, accessible online (Genaway, 1984).

Specialists such as Alain Jacquesson try to define precisely the term integration: "the set of computerized operations of a library, planned and designed so that the modules or subsystems blend harmoniously and users are offered operational facilities" (Jacquesson, 1992).

The integrated management system is superior to the non-integrated one based on the following advantages: there is no need to create and maintain multiple copies of bibliographic records, the reduced number of errors based on the digital transmission of data in the entire system, flexible location access to data of both librarians and users

Let's take the case of the ULBS Library, which has undergone a special evolution in the last twenty years, reaching the first positions among the most modern university libraries in Romania, it has an integrated computer library system, which is monitored by the modern system library management (Volovici et al, 2011).

- As a result, a basic component is the modern library management system, a computer system based on Internet technology, which incorporates state-of-the-art programming concepts and includes all the necessary facilities for library administration.
- A second component is represented by the security system of the documentary units, a system based on Rfid technology, which includes basic equipment and accessories: Rfid chip labels, car stations, library stations, mobile readers, security gates , self-return station with conveyor belt, reader cards (equipped with Rfid memory chips).
- A third component appears as a result of the integration with the university management system - UMS, through the personalized issuance of user cards, which can then be used on the stations of self-loan and self-return of books provided with smart tags that are from the identification and location system through RFID technology.

This integrated system is proving to be extremely effective, all the more so as it makes it possible to adapt work to the conditions imposed in 2020 by the Covid pandemic19.

### 3. Conclusions

Libraries manage a very large amount of information, data, metadata, recorded on different media, which can be accessed when needed. Information support is not so important as long as the information exists and is accessible. It is important to have a system in place to manage and organize the information so that it can be found and made available to those interested. Such a system involves management aimed at this goal.

Through an adequate integrated management system, which aims to minimize risks and maximize the use of resources, libraries will efficiently and effectively fulfill their mission and objectives.

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## THE IMPACT OF THE COVID-19 PANDEMIC IN THE GULF COOPERATION COUNCIL' REGION

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**Abstract:** *The Covid-19 pandemic has taken a great toll on economies and societies around the world while continuing to unfold its negative effects at the moment of writing. In this context, many trends already underway in the global economy are just moving forward faster, accelerating certain tendencies. The paper sheds light on the Gulf Cooperation Council particular situation, discussing the pandemic's impact and systemic challenges, relying on economic indicators and primary data from the region. It discusses the threats posed on the economic and social fabric, however there is yet to answer the dilemma of how and when regions and countries start recovery, as there is not an end in sight for the pandemic. Nonetheless, the analysis debates several possible scenarios for the specific case of the Gulf States, noting its limits as it tackles only the initial shock produced by Covid-19 pandemic, the crisis being underway.*

**Keywords:** Covid-19; pandemic; GCC; economic; costs; recovery

**JEL classification:** F50

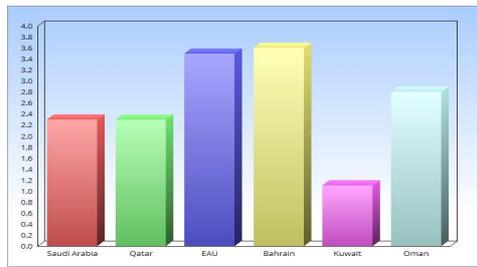
### 1. Introduction

Severe acute respiratory syndrome coronavirus 2 (Sars-CoV-2) stands for the virus responsible for global coronavirus outbreak. The scientific community has yet to agree upon the definition of transmission and other epidemiological aspects of this fatal virus. In terms of global economy, the Covid-19 pandemic does not represent only a health crisis, but also a costly occurrence. The paper addresses the consequences generated by the pandemic in the Gulf Cooperation Council (GCC)' region, focusing on its economic particularities. For rendering the analysis, the paper reviewed the experts' view on the background of the existing situation and the implications for the economy. The GCC – consisting of six members, namely Saudi Arabia, Qatar, Bahrain, Kuwait, Oman, and the United Arab Emirates (UAE) - economies display certain common features. The sanitary crisis is currently juxtaposed with the oil market fluctuations, resulting in an explicit drop of governmental spending in the near future. In addition, many other sectors are suffering from the Coronavirus outbreak, thus require support, which in the GCC comes mainly via governments. The GCC budgets have to face economic burdens in order to support the Covid-19 meltdown (Zaccara et al., 2020). Subsequently, reducing remittances from the Gulf causes strains in other Middle Eastern countries that depend on these sums. The International Institute for Strategic

Studies (iiss.org, 2020) reports that GCC is a place where expats outnumber the natives and represent transportation hubs linking Asia and Europe, increasing the exposure to the virus' transmission. In addition, the GCC is known for the over cramped housing facilities for foreign labourers that work for the grand infrastructure projects. The Gulf States have invested massively in airlines, tourism, and logistics and are depending of supply chains namely in agriculture, which were all distressed during the Covid-19 crisis (Woertz, 2020). But on the other hand, the GCC countries faced the impasse with a certain degree of confidence for various reasons. There is a recollection of tackling the Middle East respiratory syndrome-related coronavirus (MERS) in 2012, adding the experience of dealing with many pilgrims (Saudi Arabia being the epicentre of Islamic holy sites) and tourists (mostly in the United Arab Emirates) and a good digital infrastructure (all over the territory). The paper overviews the economic impact of Covid-19 in the GCC region, highlighting some of the measures taken and prospects. From a methodological standpoint, the paper elaborates on statistics, primary data, and articles available. Subsequent to the scrutiny of the materials, the analysis examines how the crisis could be optimized in the favour of the GCC countries' economies. However, the end of the pandemic is not yet in sight at the moment of writing. Therefore, one has to answer how to solve the dilemmas of economic scarcity, generated by Covid-19 even in a wealthy background like the GCC.

## **2. COVID-19 in the Gulf Cooperation Council region**

The impact in the GCC and Middle East and North Africa (MENA) region is expected to be compelling (Wright, 2020). The sanitary crisis is cumulated with dwindling oil prices; thus, the Gulf governments' revenues are severely shrinking. The Middle East is to face a serious impasse when one thinks of the collective losses from oil industry, aviation, tourism, conferences, and events, because of the curfews and limitations provoked by Covid-19. This can be translated in a long-lasting troubling effect for the businesses, financial institutions (Yellinek, 2020), and stocks (Bahraini & Assaf, 2020). The International Monetary Fund (IMF) forecasts reveal also that Gross Domestic Product (GDP) growth is to be affected in 2020 in the MENA region, being more accelerated than during the previous oil crisis of 2014-15 (a drop up to 4% at regional level). The decreasing expected in terms of GDP is critical. IMF estimated (see Figure 1) that "Saudi Arabia's economy could shrink by 2.3 percent, Qatar's by 2.3 percent, Kuwait's by 1.1 percent, Oman's by 2.8 percent, Bahrain's by 3.6%", whereas EAU's GDP reduction could reach an alarming 3.5% (Fairbanks, 2020). This cutback indicates that the weaker economies of the GCC - Oman and Bahrain - are the most exposed to facing challenges in the near-future, while EAU as a more diverse economy is losing on various fronts (tourism, services, finances, real estate, and events' organization). One should also note that the oil prices could reach equilibrium in a mid-term horizon, the oil revenues being needed for restoring the inventories in the Gulf economies.



**Figure 1:** Projection of Economic Shrinkage in the GCC region  
Source: authors' creation

In addition, Covid-19 has highlighted numerous worries in the labour sector, especially regarding rights and social protection (Kamrava & Babar 2012; Rajan, 2019). Migrant workers are considered to be the most vulnerable category, additionally the reduction of the remittances they send is producing an impact over regional economies (the bulk of the foreign workers from the Gulf being from South Asia and other Middle Eastern countries). Overall, the GCC governments have to adapt their economic policies. Reduced revenues put pressure and lead to cancellation of non-essential projects and postponement of others, influencing the investments negatively. The Gulf Health Council warns that investments flows have shrunk in the region by around \$ 2 billion since mid-February 2020 (ghc.sa, 2020), because of the general risk aversion during the pandemic. The GCC central banks went to high lengths in what stimulus plans are concerned, noting that hospitality and retail services have been affected almost 100% (ghc.sa, 2020). Given that the majority numbers of workers (both citizens and expatriates) activate in services' sector, the work conditions deteriorations result in a further decline of businesses. Regionally speaking, the priority was given in order to protect nationals (thus protecting the social contract). For example, in Bahrain and Saudi Arabia, it was reported that the government released sums up to US\$570 million and \$2.3 billion respectively for private sector's salaries for nationals. Oman, at its own end, banned the cessation of work contracts for nationals who activate in the private sector (iiss.org, 2020). Therefore, governments enabled stimulation economic plans, while showing lenience for small businesses and retail, offering suspension of different fees for hospitality entities and for registration of businesses (ghc.sa, 2020). On a positive light, the Gulf States have invested in their infrastructure in the past decades. Thus, the health sector was generally prepared for the sanitary crisis (altios.com, 2020). If one could think of an opportunity generated by the pandemic that would be the extension of reforms in order to reduce dependence on oil and creation of jobs in innovative fields, reducing the reliance on hydrocarbon industry for budgetary incomes.

### 3. Conclusion

Covid-19, combined with a very capricious oil market, is creating an unprecedented disruption to the economic model of the GCC States. This debacle, however, is likely to reinforce governmental dominance rather than embarking on adjusting the social contract to less reliance on the State. Governmental bailouts favoured foremost nationals and state related bodies. Lower oil and gas revenues are

putting pressure on governments to reduce spending. Broader productivity and innovation should be emphasized in order to catch up with the economic goals, and this might be the time to advance such an agenda. Among the solutions adopted one can name budgetary contractions, limitations of travel, postponing or delaying projects in addition to state-supported financial stimulus (Zaccara et al., 2020). However, there is a window of opportunity with the current deficit in order to address structural challenges of the Gulf economies and speed up a needed transformation. Currently, it has been acknowledged there is less time to operate previous attempted reforms in the region, because of the reinforced pressure. Despite the palliative nature of the financial stimulus, the Covid-19 pandemic is sending shock waves to the labour markets, thus widening prior vulnerabilities in the extended region (El-Saharty et al., 2020), such as unpreparedness of some sectors, labour contracts related problems or the surge in unemployment. Despite the challenges enumerated and several negative consequences, the pandemic may also represent an opportunity to accelerate some reforms that would have otherwise taken longer, such as technology advancement and cuts in unproductive departments. Lastly, the paper notes its limits for tackling a subject regarding a crisis still unfolding, thus it would require additional forthcoming analysis, after absorbing the initial shock caused by Covid-19.

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## STREAMLINING THE SYSTEM OF COLLECTING TAXES IN ROMANIA

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**Abstract:** *This paper aims to identify possible solutions in order to increase the efficiency of the tax collection system in Romania. To get an overview of the problem, we used a bibliometric analysis of existing studies in the Web of Science database on tax collection. Using the VOSviewer program, we created scientific maps to highlight the situation in the world on this topic, also presenting the tax collection levels in Europe in 2019. Unfortunately, in Romania this problem has not been followed consistently, there have been different attempts, but without completion. Romania is one of the lowest-tax countries in the European Union, but in terms of the share of taxes collected in 2019, Romania occupied the second the last place in the European Union. In this paper we bring several proposals in order to streamline the collection system in Romania: digitization of the Tax Administration, carrying out several inspections at economic agents that present fiscal risk, tax cost collection analysis.*

**Keywords:** taxes; efficiency of tax collection; digitization;

**JEL classification:** M41

### 1. Introduction

Taxation is, by and large, the most important source of government revenue in nearly all countries. According to the most recent estimates from the International Centre for Tax and Development, total tax revenues account for more than 80% of total government revenue in about half of the countries in the world – and more than 50% in almost every country. Taxation patterns around the world today reveal large cross-country differences, especially between developed and developing countries. In particular, developed countries today collect a much larger share of their national output in taxes than do developing countries; and they tend to rely more on income taxation to do so. Developing countries, in contrast, rely more heavily on trade taxes, as well as taxes on consumption. Romania is facing the challenge of considerably improving its capacity to collect budget revenues, in a short period of time, in order to meet its priorities from the perspective of ensuring the sustainability of public finances in the medium and long term, so that fiscal policy can manage risks and unforeseen situations. This article addresses a topic of national and international interest, with important implications for the Romanian economy. In this regard, we have focused on trying to identify certain shortcomings in the *priorities to be followed by the tax administrations*, which have been addressed in several specialized works, priorities such as: prevention of tax arrears, voluntary fulfillment of tax obligations, mapping of tax risks regarding the activity of the tax inspection and enforcement, digitalization of tax administration, more fiscal inspections at companies with fiscal risk, concentrating the efforts of the

tax administrations on important receivables with real collection prospects, cost collection analysis, measures regarding the efficiency of fiscal control and enforcement procedures. However, it can be stated that this is not fully known matter yet.

## **2. Brief review of the literature**

Tax, a key aspect of government fiscal policy, is defined as a mandatory tax enforced by a public authority on the income, profit or wealth of a person, family, community, company or body not incorporated for public purposes (Okafor et.all 2011). According to McLure (2018) a tax "It is a mandatory financial tax or other type of tax imposed on a taxpayer (a natural person or other legal entities) by a governmental organization in order to finance various public expenses." Although the tax represents an important source of funding for economic development and the provision of social facilities and government services, taxes have also been known to affect the size, profit, growth and development of business entities worldwide (Appah, 2004 ; Okafor, et al., 2011).

The system of taxes and fees in Romania is characterized by a weak tax collection, with an inefficient administration and an excessive bureaucracy and a relatively low tax base, with many exceptions and legal deductions and a high tax evasion.

One of the problems identified in the last two years has been the one related to the arrears of the consolidated budget in the private environment, all the targets for their reduction within the agreements with the international financial institutions being missed. Although outstanding payments to the state budget have diminished considerably as a result of the authorities efforts, there is still pressure on local budgets.

The system of collecting revenues to the consolidated state budget is a topical concept studied and analyzed from several points of view, involving an analysis of both the determinants and the effects felt in society by its efficiency to the economic and legal components, the real aspects being in fact much more complex, requiring the analysis of the correlations generated by this phenomenon in accordance with the effects felt on social and economic level.

The efficiency of tax collection can be assessed through the ratio between the default tax rate (the ratio between the actual income collected for a certain type of tax and the related tax base) and the legal tax rate. This report is called the tax collection efficiency index.

In order to streamline the activity of collecting revenues to the local budget, having as a consequence the increase of the degree of collection, lately a series of measures have been taken:

- Outsourcing the service of printing and communication of attachments on the money availabilities of the debtors;
- Implementing the working procedures at the On-line and Call Center Declaration Service and starting and implementing the first stage for the submission of tax returns by electronic means;
- Development of the local taxes and fees management software, regarding the attachment, in electronic format, to the fiscal roles, of the issued documents, as well as of the confirmations of their communication to the taxpayers.

The collecting of taxes to the budget is directly related to tax burden under the Laffer curve (Achim and Borlea, 2020, p. 145). The Laffer curve reflect that in case of a tax pressure increase, the tax incomes show an increase up to a maximal point after which the tax incomes begin to decrease. For Romania, the research of Trandafir and Brezeanu (2010) was focused on building a Laffer curve based on the tax incomes obtained in the period between 2000 and 2010. The results of the analysis indicate an optimal taxable threshold of 10.96% during the investigated period, that corresponds to the maximum level of the real tax incomes obtained.

### 3. Bibliometrics analysis and results

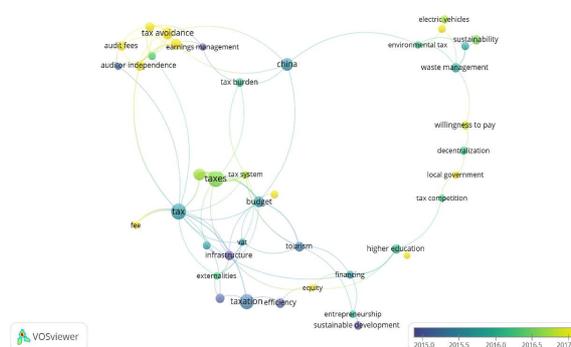
This part of the article is strictly intended for bibliometric analysis. Herubel explained the bibliometrics as “a quantitative analysis of publications for the purpose of ascertaining specific kind of phenomenon”.

According to Fink (2019), the literature review is a systematic, explicit and reproducible project to identify, evaluate and interpret the existing body of documents. The literature review seeks to: summarize the existing research, recognize patterns, themes and issues, and identify the conceptual content of the field, contributing to the theory.

According to Castriotta et al. (2019), bibliometric analysis is the most appropriate method for studying the conceptual structure of a research area. The method allows the development of studies that recognize the current state of research and identifies opportunities for future studies, through different approaches presented – academy’s interest, analysis of the influence of journals, authors, articles, keywords and contribution by country.

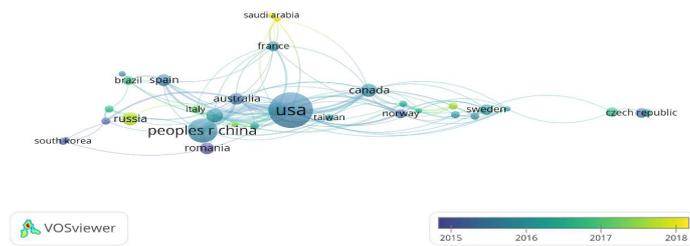
The analysis was created based on data downloaded through the Web of Science platform, data found in specialized publications, bibliographic references, with these we can examine historical developments, relationships between researchers, articles, universities.

Our contribution focuses on descriptive statistics, followed by bibliometric analysis.



**Figure 1:** is a view of the network (clusters) of keyword publications from the last 10 years on “taxes and fees.” The author analyzes keywords to obtain information about tax-related factors. Between 2010 and 2020 according to Web of Science database there have been written 992 articles which contain the topic “taxes and fees”, throughout the world.

Source: Web of Science's own database processing



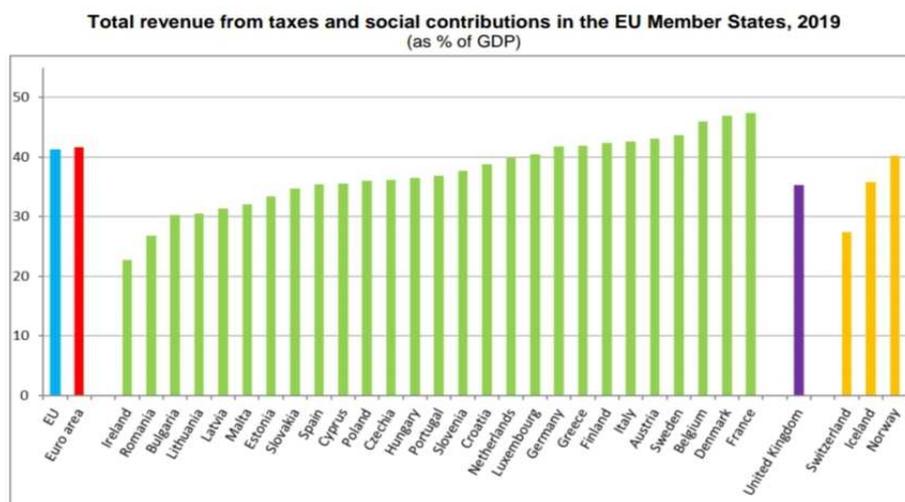
**Figure 2** : represents the country origin of the publications from the last ten years which have dealt with the topic of taxes and fees. The analysis shows that in the scientific community, the most cited publications on taxes and fees are from U.S.A., China, Russia, Australia, Canada, and so on. The links between the circles represent the cooperation between countries, in research.

Source: Web of Science's own database processing

#### 4. Ways of improving the system of collecting taxes in Romania

According to data published by Eurostat, Romania was penultimate in the EU in terms of the share of taxes collected in GDP, with only 26.8%, the lowest except for Ireland (22.7%), and significantly below Bulgaria (30.3%), Lithuania (30.4%) and Latvia (31.3%).

**Table 1:** Total revenue from taxes and social contributions in the EU Member States, 2020



Source: Eurostat

Therefore, in this paper we propose a few ways which could help the improvement of the system of collecting taxes in Romania:

**4.1 Carrying out fiscal inspections at economic agents that present fiscal risk for the Romanian National Agency for Fiscal Administration** (e.g. inspections at companies that do not declare revenue for the on-line commerce). Preliminary analyzes have shown that with the exponential growth of online sales through reputable platforms and high standards, trade in counterfeit goods or operated by phantom companies has intensified, especially through individuals or front sites, which operate for short periods.

Over time, The Romanian National Agency for Fiscal Administration has also carried out such operations as "Cristal", which targeted 4,030 wholesalers, "Iceberg", through which it verified the major companies in the country, or "Xenon", to verify intra-Community acquisitions of used vehicles.

#### **4.2 Digitization of Tax Administration**

In light of isolation measures adopted by many countries vis-à-vis the world coronavirus pandemic, we now see both the public and the private sector attempting to digitize themselves quickly. Tax authorities are gaining clear benefits. Access to transactional data increases transparency, providing a much more detailed picture of taxpayers' accounts and dealings. They can combine data analytics with other tools to review data across taxpayers to identify broad patterns and detect areas of non-compliance risk. They can then use this information to select cases for audit, optimize debt management processes and design taxpayer communications to encourage compliance. There is a need for digitalization of tax administration, which is currently facing a major challenge but also an excellent opportunity to make sure that all of the processes are digitized. But all this has significant impacts, as one of the most important advantages of electronic administration can be listed as possible:

- Lower costs and greater revenues
- Increased efficiency and effectiveness
- Greater transparency
- Struggle against corruption
- Improve risk management techniques and audit efficiency
- Electronic cooperation with other Tax Administrations

#### **4.3 Tax cost collection analysis**

Romania is one of the states with the lowest taxes in the European Union, but an analysis of the evolution of the collection level and a comparison with states that have a similar level of taxation show that the problem is also in the collection of taxes.

Generally, the "state-taxpayer" interrelation bears costs which can be separated into administrative and compliance costs. Administrative costs represent governmental costs derived during tax collection process, while compliance costs are overall resources spent by taxpayers in meeting their tax obligations. These two types of costs, mainly, are considered as operation costs of a tax system. Minimizing the cost of tax collection must be an important objective of every budgetary policy.

## 5. Conclusion

Therefore, it is recommended that the state government should place more emphasis on streamlining the tax collection system by educating the business community, prevention of tax arrears, digitalization of Tax Administration, conducting more inspections at companies with fiscal risk, cost collection analysis. The bibliometric analysis, brought a new point of view in our research. It is possible to identify new research areas in the field. Research on this topic from the past to the present has seen significant increases. We believe that the results of this research could have significant implications for scientists, university professors and students, as they reveal the research gap in this field, which indicates areas that could be researched in the future.

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## DIFFERENT WAYS TO EVALUATE A COMPANY

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**Abstract:** *The following study will try to compare 3 ways of evaluating a listed company. It will start from the most simple and elegant way to a very intricate formula. I will explain also what are the benefits of each evaluation. Each formula as it gets more complex is used by less investors. The first reason is that many don't understand them. The second one is that not everyone is aware that they exist. When having to make an investment decision is better to know as much as you can. This is why we will explore the amount of knowledge each formula is expressing.*

**Keywords:** market capitalization; P/E; enterprise value; EBITDA;

**JEL classification:** D46; E44; F10; G19; G24;

### **1. A brief look at 3 ways to evaluate a company:**

When it comes to evaluating a company in terms of future investment there are numerous ways to do it. The economic world is full of financial analysts and many have developed personal ways to evaluate a company. Some are straight forward, some are more intricate. It is in the best interest of the one who uses them to pair correctly between the method he uses and the result desired. There are 2 major opposite types of analysis: technical and financial. Each one is more suited for different investment types. From each we have different ways to evaluate a company. In this paper we will look at 3 different methods of evaluating a company. They will be explained and some of the weak spots will be revealed.

### **2. Methods & comparison between them:**

Between the investors are different ways of evaluating a company. The most easy and common way is to look at share prices. Actually, they don't evaluate a company in any way. Share prices are a measure of the feeling about the company at a certain time. For example, a Berkshire Hathaway inc. (BERK-A) is 309503 usd on 04.11.2020 and an Apple inc. (AAPL) share is 149,5 usd as of 04.11.2020. That doesn't mean that Apple is 2070 times less of a company than Berkshire. Actually Apple inc. worth's 4 times more than Berkshire Hathaway in terms of market capitalization.

Market capitalization is a much better way to compare 2 companies in the sense of how much an investor is willing to pay for that company. But that is never the case. No one in history bought a majority stake in a company by looking at what is the current capitalization and give that much to all the stock holder's in the market. That is not how things work in takeovers. And if the company is in a bad financial

situation, a takeover is actually dictated by how imminent is the bankruptcy than the market sentiment. Is its common reference to express a bailout in terms like X cents for a dollar. For example, 80 cents for a dollar means: the company was purchased at 80% of the current market value.

The most used method of evaluating a company is P/E (Price-to-Earnings Ratio) or PER. This is a well-known coefficient of evaluating a company's probability. The formula is:

$\frac{P}{E} = \frac{\text{share price}}{\text{EPS}}$  where EPS (Earnings per share) is defined most times as:

$$\text{EPS} = \frac{\text{company's net profit}}{\text{(number of common shares has outstanding)}}$$

EPS has in economic literature many forms, all dressed up under same symbol. This is why P/E may vary a lot from one economic analyst to the next.

P/E was originally developed as a barometer of a stock's price ascension. It was common knowledge around the 40's and the 50's that the Great Depression was a consequence of high P/E. Some may argue that is true, some might find just the right proofs. But the reality is if you have a preconception about something and you take the effort, you can prove you are right, especially in a non-deterministic system.

Today P/E is regarded as a trust/under evaluated barometer. Instead of getting afraid of high P/E, some bold investors actually see it as a display of faith from the investor's in a company's future. A century ago, it was a risk measure, now it is the opposite. High P/E, mean's general consensus towards a company's ability to generate better and better financials, year after year.

A low P/E was usually regarded as a risk-free consensus. Today is regarded as a way to determine if a company is less visible in its sector. A less visible company, can mean 2 things:

- A company is not a reference player in that sector having a low market quote
- The company is less expected to have a change in overall financials' in coming year's

The first case, if applied to a new company, that is actually growing fast, is something to look for. A small company, a startup, can reinvent a whole industry. Along the last century we have numerous examples of those cases, just to give a few:

- Xerox- the most desired stock of the '60 (Brooks, John (2016) "Aventuri din lumea afacerilor. Povești de succes și eșecuri răsunătoare de pe Wall Street", Editura Litera)
- Tesla a 17 years company that disputes the dominancy in an industry where giants, over a century old, reign
- PayPal who reinvented wire transfer industry dominated by MasterCard and Visa
- Netflix that changed the television forever,
- Google that started as a peculiar math's algorithm to sort people's choices and today is similar with the accessing the internet.

A big company that is older than a decade and was stable for years, having about the same financials statements is not attractive. A great example of this case is: Pfizer Inc. (PFE). In 1 September '98 the stock price was 37,31. Today, 04,11,2020 the stock price is 37,33. That is not a lot of movement in 22 years of activity.

(<https://finance.yahoo.com/>) They are consider not rewording stocks. If those stocks don't have a good dividend and a solid dividend track record than you should look the other way. Being very stable is not necessarily a good thing. A no brighter future is not the stability you are looking for.

I hope I don't have to remind you that there are more safe ways to make small interest to your money: long term deposits at banks or prime bonds.

Another way to look at P/E is the horizontal way. This is better when comparing stocks to bonds or long-term deposits. For example, a P/E of 50 is considered high. But that actually mean's 2% interest on your money or 50 years to get 100% interest on your investment. That's better than 0,25% interest at long term deposits and also better than 1,25% on first grade bonds. A P/E of 20% which is consider medium is actually a 5% interest rate on your investment, which is 20 times the interest bank's give you on long term's deposits in euro. (Fisher, Kenneth L. (2009) „Singurele 3 întrebări care contează: Cum să investești știind ceea ce alții nu știu”, Editura Injoy Books)

Another way to analyze a company is by looking to its financial statement. But there are many variables to take into account. So, for those that look at the real value of the company, usually know as value investors, EV (enterprise value) is a better indicator. Is actually the selling price of a company. Many would argue that if the company is not on the verge of a merger, or takeover, is not important. They would state the fact that actually in the day by day market only less than 1% of the company shares are traded.

I consider to be a very unrealistic way of thinking. All listed companies are permanently being sold and being bought. A purchase of stocks is a purchase of a company. Even if you purchase 1 stock, you are a company owner. So, acquiring a company mean's taking over assets and debts at the same time.

The EV formula is:

“ $EV = MC + \text{Total Debt} - C$ ”

where:

MC=Market capitalization; equal to the current stock price multiplied by the number of outstanding stock shares

Total debt=Equal to the sum of short-term and long-term debt

C=Cash and cash equivalents; the liquid assets of a company, but may not include marketable securities” (<https://www.investopedia.com/>)

To see if price is just right you should compare EV to EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization). “Investors use EBITDA as a useful way to measure a company's overall financial performance and profitability. EBITDA is a straightforward metric that investors can calculate using numbers found on a company's balance sheet and income statement. EBITDA helps investors compare a company against industry averages and against other companies.” (<https://www.investopedia.com/>) A ratio of 10 or less is a great one. A ratio above 16 mean's it is expensive and so on. In order to have a right angle of view, you should compare the company with similar one in its field.

If we take in consideration some exaggerated, yet real, examples we will see how unconnected is the perception of the investors to some stocks. For example, Qudian has 0,58 EV-to-EBITDA, while TESLA has 102,6 as of 04,11,2020. Qudian has the best EV-to EBITDA from all 249 companies listed in NYSE in the Credit Services Industry. The Credit Services Industry has a coefficient median of 13,94.

Tesla on the other hand, is on the bottom of Vehicles and Parts Industry, in the last 5% from 931 companies listed on NASDAQ. The industry median is at 11,53.

This being said, in the past 2 years those 2 companies have opposite evolution of share prices. They both went in the wrong direction. Among traders is a saying: "The market will always correct itself." We will just have to wait and see if the saying is true one more time.

In my personal opinion EV to EBITDA is a more stable and concrete indicator on the long run than all of the above.

Also, you can adjust it by its market stake, making it a general indicator. A bigger market stake mean's more control, more consumer influence and more power to set industry standards. So actually, I use the upgraded formula of:

$$EEI = \frac{EV}{EBITDA} * \frac{1}{market\ share}$$
, where market share is expressed in hundredths, 20% market share is actually 0,20. The smaller the number the cheaper the company is. EEI stands for: Enterprise Evaluation inside Industry. It is a personal way of making a complicated formula even more intricate. The goal is to add in a number as many factors as possible in the correct proportion.

### 3. Conclusion

There are many types of evaluating a company. Each one has its own up's and downs. None is perfect. The more comprehensive is an evaluation, the better it can provide as a general view of the company.

On short terms the enterprise evaluation means nothing. But on the long run, it should be a reliable tool in assessing a company.

As general knowledge is accepted in the majority of investment theories that a well-known information is reflected in the market price by the time is well known. This is the main reason I have decided to elaborate about 3 different ways of evaluating a business, starting from the most used to one that is mostly unknown.

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<https://www.fitchratings.com/>

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## **EMERGING MARKETS: PROFITABILITY OF CHINESE BANKS USING REGRESSION**

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**Abstract:** *Emerging markets countries are assumed to play a decisive role in international trade and finance as well as to contribute significantly to the global economic growth. Doing business in Emerging Markets reflects the challenges and opportunities facing international businesses and professionals when operating in emerging markets. There is extraordinary competition among emerging markets to capture their share of the global economy. Emerging markets are commonly considered relatively riskier than developed markets as they carry supplementary political, economical and currency risks. In this paper I apply linear regression using IBM SPSS Statistics in order to measure the profitability for 51 banks from China during the period 2016 to 2019. Also, I present descriptive statistics that show a general overview for the variables. The variables that are in the center of analysis are Return of Assets and Net profit Margin.*

**Keywords:** bank profitability; regression; statistics; China

**JEL classification:** M21; G21

### **1. Introduction**

Emerging markets mutual funds are investment portfolios that offer foreign investors chances to invest in alternative markets based in Eastern Europe, Asia and Latin America. These funds are in the area of interest for individual and also institutional investor which aim to increase their returns and diversity risks. This type of funds experienced an accelerated growth over the past 25 years following the liberalization of economic and financial policies in diverse countries in Eastern Europe, Asia and Latin America. Emerging markets are usually considered relatively riskier than developed markets as they carry additional political, economical and currency risks. The term of emerging economies refers to nations with social and business activity in the process of fast growth and industrialization. The seven largest emerging economies according to nominal gross domestic product (GDP) are: Brazil, Russia, India, China, Mexico, Indonesia and Turkey. Investing in emerging countries may lead to volatile return, like the probabilities of large profits and large losses are high. The performance of investing in emerging markets is often considered less correlated with developed markets. As a result, these markets could be good investments for diversification purposes. These economies are growing fast, so the information that is defining them is easily outdated as their structure is quickly evolving.

Entering an emerging market is not easy. Opportunities in the emerging markets come with their own set of challenges. Sometimes, lack of education of the workforce require a lot of patience, perseverance and specialized assistance. Also, legal frameworks with regard to trade policies can be absent or underdeveloped. It is necessary to mention that infrastructure remains a significant problem in most emerging markets. Only China is investing seriously in roads, railway and ports, but somewhere else the progress is weak.

It is very important to understand the market, so the following aspects need to be considered of when it is an interest for investing in emerging markets: market potential, understanding the local customers, reaching the customers, competition, lessons learned by non competitors, local culture, economic outlook, political outlook, government policies, finance, labor market, taxation, legal environment, bureaucratic obstacles to business, crime and corruption, infrastructure, and of course cost of building a business and a brand.

## **2. Literature Review**

The problem of financial performance classification has been tackled in the literature for nearly 50 years. The general consent from the literature regarding modeling bank profitability favors a linear analysis approach. Short (1978) and Bourke (1989) considered several functional forms and concluded that the linear model produced results as good as any other functional form. In the situation of factors within the control of management, the immediate factors that would have an impact on bank profitability would be those factors that affect a bank's net interest income (Guru et al., 2000). To this extent, the net interest margin could be expected to have a positive influence on the bank's profitability.

## **3. Analysis and Results**

The dataset used in this paper contains financial information about 51 banks from China during the period 2016 to 2019. The sample size contains 204 observations. The purpose of my research paper is to analyze the profitability of Chinese banks using two important profitability indicators: Return on Assets and Net Profit Margin. The dataset was imported in IBM SPSS Statistics and all the variables were coded accordingly. In order to see the profitability of Chinese banks I use in this paper linear regression where the dependent variable is Return on Assets (ROA) and the independent variable is Net Profit Margin. Regression analysis is a statistical technique for investigating and modeling the relationship between variables. Equation of regression is:  $y = \beta_0 + \beta_1 x$ , where where  $\beta_0$  is the intercept and  $\beta_1$  is the slope.

ROA is an indicator of how profitable a company is relative to its total assets. Net Profit Margin is a measure of profitability. Using linear regression in IBM SPSS Statistics, there are generated the R and R Square. R Value equals 0.738, which indicates a high degree of correlation. R Square indicates how much of total variation in the dependent variable (ROA) is explained by the independent one (Net Profit Margin), so it is the correlation between the observed and predicted value of dependent variable. R Square=0.545, so 54.5% of the variance in ROA can be predicted by Net Profit Margin. Coefficient Beta is measured in standard deviation and has a value equal with 0.738.

So, a one standard deviation increase in Net Margin Profit leads to a 0.738 standard deviation increase in predicted ROA. Net Margin Profit has a positive impact on ROA. The variance inflation factor (VIF) = 1.000 is less than 10, which indicates that there is no multicollinearity.

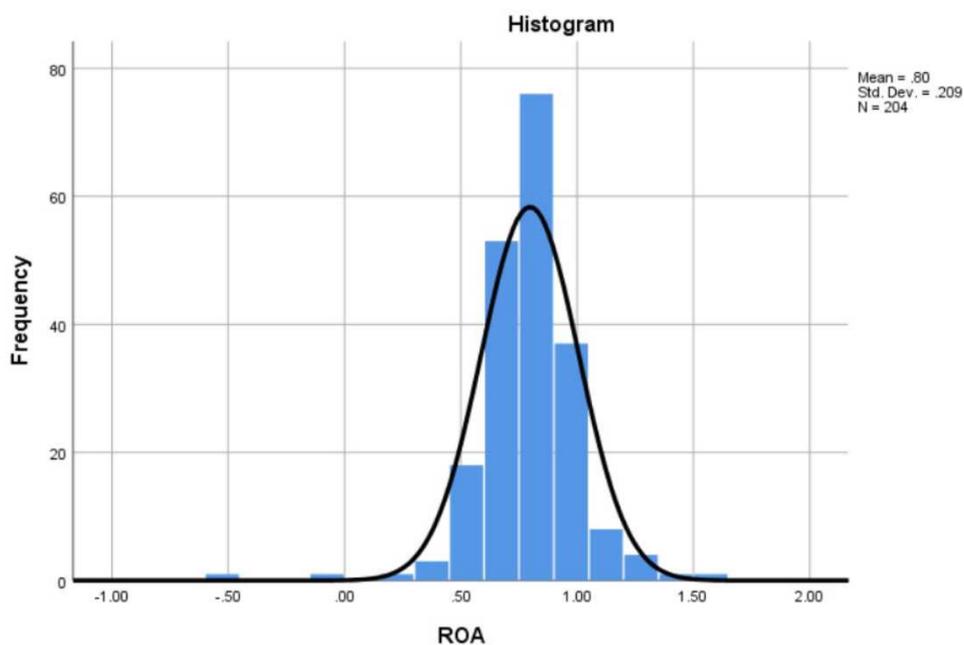
ROA and Net Profit Margin are continuous variables. The regression equation is  $ROA = 0.171 + 0.019 * \text{Net Profit Margin}$ .

Regarding descriptive statistics, Skewness is a measure of the asymmetry of the probability distribution of a real-valued random variable about its mean. For ROA, Skewness = -1.362 meaning that the asymmetry is negative and the distribution is tilted to the right and has extreme values on the left side.

Like Skewness, Kurtosis describes the shape of a probability distribution. Kurtosis for ROA = 9.918 which indicates that the distribution is leptokurtic, so there are more values concentrated around the mean.

Coefficient of variation =  $\frac{\text{Standard Deviation}}{\text{Mean}} * 100$

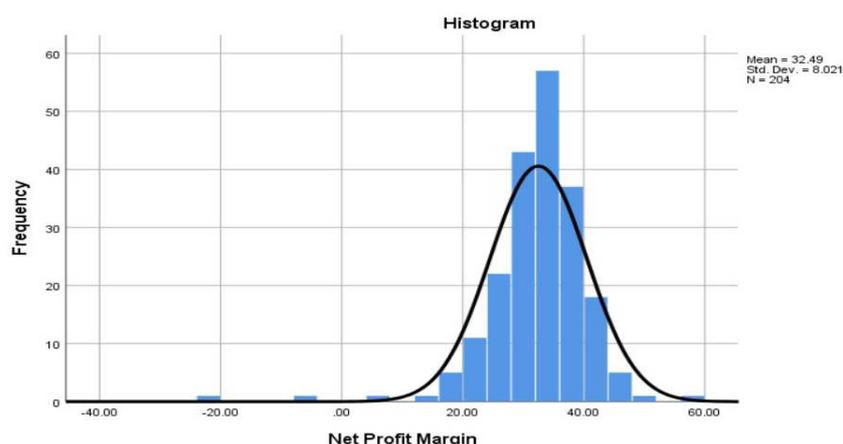
Coefficient of variation (ROA) = 26.12%, which is less than 35%, so it can be stated that the mean is representative for the sample. The sample is homogeneous for ROA variable.



**Figure 1:** Return of Assets Histogram  
Source: Author own research results in IBM SPSS Statistics

For Net Profit Margin, Skewness is -1.982, which means that the asymmetry is negative and the distribution is tilted to the right and has extreme values on the left side. Kurtosis = 11.631, so the distribution is leptokurtic.

Coefficient of variation (Net Profit Margin) = 24.68% < 35%, so the mean is representative for the sample. The sample is homogeneous for Net Profit Margin variable.



**Figure 2:** Net Profit Margin Histogram  
 Source: Author own research results in IBM SPSS Statistics

#### 4. Conclusions

In this paper, I generated a model of the profitability of 51 Chinese Banks during the period 2016-2019 for Return of Assets and Net Profit Margin. The main objective of this method was to evaluate how banking has been affected by these measures. A one standard deviation increase in Net Margin Profit leads to a 0.738 standard deviation increase in predicted ROA. So, Net Margin Profit has a positive impact on ROA. Also, descriptive statistics was used in order to observe how the distribution is for both variables and to check if the mean is representative for the sample.

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## EUROPA-WIDE CORPORATE TAX COMPETITION AND THE EFFECTIVENESS OF COUNTERMEASURES

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**Abstract:** *International corporate tax competition has become one of the most discussed topics in the last decades. Politicians are encouraged to find solutions to curb anti-competitive tax activities. The present study aims to show the development of tax competition in its various forms and to examine the effectiveness of the countermeasures proposed. An empirical study has confirmed that tax competition has intensified in recent decades. At the same time, the risk of overreactions and unintended negative side-effects due to not comprehensively thought-out legislation is growing. The following research question will be addressed in the context of this paper. How has corporate tax competition developed and what countermeasures can be considered effective. To answer this research question, a qualitative content analysis of journals, articles and literature published in international databases was used and evaluated. In order to substantiate the literature research and the results obtained, a quantitative analysis of the development of the corporate tax rate was carried out.*

**Keywords:** Corporate Tax Competition; Tax Reform; Countermeasures; Effectiveness EU initiatives, CCCBT, GloBE

**JEL classification:** F6

### **1. Introduction and motivation**

On the European market, there are only a few hurdles left that can prevent a multinational company from selling products or relocating investments in the European Union (EU). This has paved the way in the past for selling products in an international context and making investments around the globe. Today, neither the network nor the infrastructure poses challenges, as these were developed in the past. What worries multinational companies and countries, however, is the increasing complexity of dealing with institutional challenges and the differences in the country systems (Linsi, 2019).

With networking and the associated transparency, the comparability of different parameters between countries increases. This enables a comparison of systems, subsidies or even tax rates. With the newly gained transparency, tax competition between countries also intensifies. By enhancing the attractiveness of a country, the aim is to attract investment and thus improve the country's welfare (Azémar, 2020). Thereby, multinational companies have the opportunity to apply the more advantageous tax systems in another country, to use tax leeway to their advantage or to apply tax avoidance practices.

The transparency described above leads multinational companies to choose the country for investments that correspond to their strategy. As a result, the countries are in competition with each other and constantly try to improve the attractiveness of their country. The constant urge to create incentives for companies to attract investment, results in a downward spiral. In order to defuse tax competition and end the decades-long debate, countermeasures are required. In the past, European tax policy has conceived a wide range of countermeasures (Nebus, 2019). The last proposal to defuse tax competition was published in 2020, which at the same time illustrates the topicality and the public interest in this issue. The proposals, initiatives and countermeasures are fundamentally different from the conception and focus on different problem areas. Here, it is necessary to analyse the various areas of reform and discuss their effectiveness.

## **2. Corporate tax competition - conceptual basis and development**

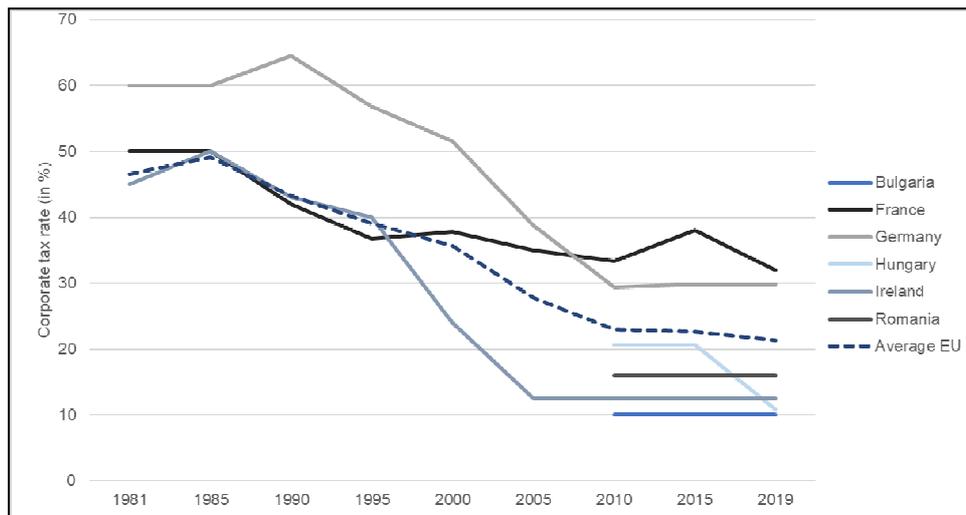
A prerequisite for tax competition is cross-border transactions, which can take various forms such as investment, trade or speculation. The taxation of these transactions varies greatly and creates preferences and incentives. However, the background of the creation of preferences or tax incentives can be different. This is also the reason why tax competition can be divided into two forms.

The OECD distinguishes here between harmful and harmless tax competition. Harmful tax competition occurs when infrastructure and public goods are used in one country, but tax revenue is shifted to another country only because of a corporate policy such as minimizing tax revenues. This deprives the country of monetary resources that need to be invested in maintaining infrastructure and using public goods. In return, the country receives a financial subsidy that has no need for investment due to the shifting of corporate profits (OECD, 1998).

In contrast to harmful tax competition, fair tax competition can be understood as a political decision by a country that grants tax relief either by lowering statutory tax rates or by granting subsidies. Tax reform aims to meet the investment need of a country and to align the tax system to these needs. Fair competition does not aim to undercut other countries but is basically about domestic political decisions (OECD, 1998). When taking a closer look at harmful competition, countries pursue different strategies and objectives. The overall goal is probably the same for most countries. The country attractiveness is to be increased in order to attract mobile taxation objects. Mobile taxation objects can be financial resources such as subsidiaries or research and development centers.

The ways in which countries can increase their attractiveness are far-reaching. In addition to the often-discussed reduction of corporate taxation, there are other possibilities for increasing the attractiveness of a location, such as adjusting the tax base, introducing new preferential tax regimes or optimizing the tax framework. The simplest and yet most effective measure to increase the attractiveness is certainly the rate of taxation under collective bargaining agreements (Cooper, 2020). The following figure illustrates the corporate tax rate within the EU. A total of seven data lines are shown, which on the one hand represent the EU average and on the other hand three high-tax countries (starting from 1981) such as France, Germany and Ireland and three low-tax countries such as Bulgaria, Hungary and Romania. Since countries like Bulgaria, Romania and Hungary joined the EU later, the lines do not begin until the years of accession.

The period chosen is from 1981 to 2019, so that a comprehensive picture can be drawn.



**Figure 1:** Development of the corporate tax rate (1981 – 2019)

Source: Own computations based on European Commission (2020a)

It can be seen that the general trend is towards a significant reduction in the tax rate. At the beginning of the period under review, the corporate tax rate is at an average of 46%, with the high-tax country Germany with 60% being well above the average. In the countries Ireland and Germany a drastic decrease of the tax rate can be seen, which remains at an almost constant level in 2010. France, on the other hand, is not experiencing such a steep decline as the other high-tax countries. But here, too, a downward trend is evident.

With the year 2010 the countries Bulgaria, Hungary and Romania will be added. The countries Romania and Bulgaria have a constant tax rate of 16% and 10% respectively. Hungary in turn, halves its tax rate from 20% to 10% to compete with the other low-tax countries. As can be seen in the figure, Germany and Ireland are the countries that have reduced their tax rates the most and the EU average also follows this trend.

Looking at the EU average, it can be seen that the peak of 49% was reached in 1985 and that the reduction of the corporate tax rate was pursued. In 2019 the EU countries have reached an average of 21%, with Germany having the highest tax rate of 29% and Hungary the lowest rate of 10%.

The empirical presentation of the development of corporate tax rates from 1981 to 2019 shows that there are many activities in the field of taxation and that each individual country is dealing with the topic. The trend in the tax rate also underpins the tax competition and clearly shows that in some cases a reduction by half has taken place within 38 years.

### **3. Tax policy initiatives and measures against tax competition**

The development of corporate tax rates makes it clear that the future cannot be the same as it has been over the past 38 years, as the volume of investment in the home country would no longer be sustainable. Solutions and ideas are bundled into proposals, initiatives and reforms and discussed in the countries. However, designing an all-encompassing and successful reform for international taxation requires a lot of time, many attempts and a high degree of adaptability.

For a long time, tax avoidance was not an explosive issue and was therefore not developed further (Wang, 2019). With the interest that has now emerged and the pursuit of goals to advance international tax policy, certain problematic conditions must be met in order to implement tax reforms. Tax competition is reaching new levels from year to year, and policymakers are trying to respond to this again. In the following, the steps and initiatives taken by all EU participants since 1990 are examined. The presentation is followed by a critical analysis of the effectiveness of these measures.

#### **3.1. Increasing tax transparency**

To avoid aggressive tax planning and profit reduction, tax transparency and cross-border information exchange are becoming more and more important. To increase tax transparency, multinational companies are required to publish their tax burden per country. Unfair tax practices could be exposed with the increased tax information content and could be dissuasive examples through publication. The aim of this initiative is to create transparency by disclosing the different tax burdens per country. This is to prevent companies from saving taxes in certain countries or shifting profits.

In order to pursue this initiative, the EU has developed a so-called Country-by-Country-Reporting (CbCR), which, for example, demands the turnover, profit and tax burden per country. However, the specific reporting should only be applied to multinational companies with annual sales of more than 750 million euros. With this information, tax offices are able to determine in which country the profits are to be taxed and how high the tax burden is in the respective country (Joshi, 2020).

The effort required to introduce such a report should not be underestimated. This hurdle has certainly been overcome by most of them. However, there are some questions that remained unanswered during the preparation of the report, which were not addressed in the OECD paper. Also the transmission of data in an XML tool requires the necessity to have an IT tool in use, which can bundle all company data. The use of the ELMA interface of the Federal Central Office, which is required from July 2019, does not make the application any easier (Brown, 2019).

The verification and processing of the data poses a great challenge to the tax authorities. The OECD has created a manual with indicators for checking the available data, which is intended to identify tax risks.

The public CbCR is still in the middle of the discussion and no decision has yet been made on it. If there were an endorsement of public reporting, this would not only result in a high administrative burden, but would also influence the competitive situation. The publication of the data would not only distort competition within the EU, but also countries outside the EU would have access to the information. Public denunciation is also not an adequate means of official sanctioning (Oats, 2019).

The advantages are certainly to be seen in the detection and future avoidance of aggressive tax avoidance. There are few studies that deal with the reaction of the

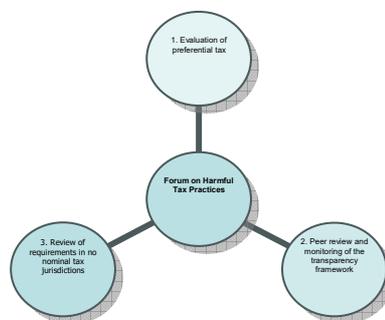
public denunciations. Looking at the tax avoidance incident of the Starbucks company in the UK, the public reputation in the UK declined (Chapman, 2017). One study found that the shares of a publicly denounced company increased and even benefited (Huesecken, 2018). It is questionable to what extent the two studies can be applied to the general public. Thus, at this stage, no concrete effects can be determined.

In addition to the existing CbCR initiative, a proposal on administrative cooperation (DAC 7) was adopted in July 2020. This proposal aims at tax transparency within digital platforms. The aim is to ensure that companies that sell various goods or services on platforms and earn their money from them also have to pay their share of the tax. The proposal on administrative cooperation will ensure that EU Member States are informed about profits made online. It would also be conceivable that by pooling information, EU-wide cooperation in tax audits could be established (European Commission, 2020b).

### 3.2. Multilateral initiatives

With the increasing globalization and the recognition of a growing problem in the context of different taxation concepts, an uniform Code of Conduct was designed. In 1997 and 1998 a Code of Conduct was introduced to curb harmful tax competition within the EU Member States. The aim is to identify and curb anti-competitive taxation. Binding standards of conduct are to be established for all employees of a multinational company within the EU in order to prevent opaque situations with regard to legality. The Code of Conduct is not a legally binding contract, but the Member States have committed themselves to compliance. To this end, a catalog of criteria for assessing harmful competitive practices has been published. The key points are on the one hand the review, amendment and abolition of harmful tax competition and the prevention of the introduction of new tax competition (European Council, 2019).

At the same time in 1998, the Forum on Harmful Tax Practices (FHTP) was conceived by the OECD with the aim of assessing preferential tax regimes with regard to their impact on tax competition. It conducts reviews to determine whether or not established tax concepts are detrimental to the tax base of other Member States (OECD, 2020). Based on the principle described above, three criteria have been collected to ensure an uniform review.



**Figure 2:** Forum on Harmful Tax Practices  
Source: Own computations

The first criterion for assessment relates to preferential tax regimes. It is based on the assumption that the different tax structures of different Member States do not have a negative impact on the tax bases of other Member States. Instruments will be identified which can contribute to a reduction of the tax base and can favour profit shifts. The second aspect comprises the mutual assessment and monitoring of the transparency framework. Relevant information on taxpayer-specific issues will be exchanged. The last evaluation criterion is the review of the requirements relating to the main activities of areas with nominally low tax revenues. The aim is to create a level playing field (OECD, 2020).

Advantages in the multinational initiatives are certainly the uniform and transparent regulations that exist for all Member States. This means that each country has the same regulations and knows the direction of the EU. When assessing the initiative at the supranational level, compliance is not checked by the authorities but only by the self-assessment of the Member States, which is a regulatory problem.

It should also be noted that the existing harmfulness test is only applicable to preferential arrangements and not to the general tax system. This means that a lower tax rate can be applied, which has a much greater impact on the tax burden than the Code of Conduct. At the same time, the FHTP was conceived by the OECD with the aim of assessing preferential tax regimes in terms of their impact on tax competition. Based on the principle described above, criteria were collected in order to ensure a uniform review.

### **3.3. Harmonization of company taxation policy**

The harmonization of company taxation, which was discussed for the first time in 2001, is intended to contain barriers to competition in the internal market. A step-by-step approach is now being presented by the European Commission, which is intended to help to optimize the calculation of the tax base. The intention is to unify the 28 different tax systems and avoid distortions of competition. The proposals presented below are intended for multinational companies with an annual turnover of 750 million euros.

The first proposal is the directive on a Common Corporate Tax Base (CCTB) to harmonize the rules for determining profits. The focus of this first proposal is on a uniform determination of profits. It also deals with the precise rules for the depreciation of fixed assets, investment incentives for research and development or the tax treatment of losses (European Commission, 2017).

The second proposal is a directive on a Common Consolidated Corporate Tax Base (CCCTB), which consolidates and distributes company profits within the EU. In the extended proposal, the consolidation of profits is the main aspect. This is intended to remove the low threshold for shifting company profits within the group. By means of a consolidated determination of profits, all European transactions are to be taxed centrally at the level of the parent company. The total consolidated profit of the company is then allocated to the Member States using a formula. The formula currently decomposes the factors work, fortune and external turnovers, which enter in each case with same weight (European Commission, 2017).

The different tax systems at national level no longer appear adequate in such a networked internal market. The differences within the countries are far-reaching and lead to competition problems. The present initiatives would therefore make it possible to design tax systems more efficiently and thus eliminate tax avoidance theories. As a side effect, the transparency of tax information would be increased.

Critical to the proposal is, on the one hand, the right to choose the method of application, which weakens the power of enforcement. On the other hand, the restriction to European transactions, which could shift tax avoidance practices to non-European transactions.

### **3.4. Adjustment of corporate tax rate**

In addition to the initiatives described so far, which on the one hand aim at an EU-wide tax transparency and on the other hand the fundamental systematics of the tax base, there is also a need for action in the determination of the corporate tax rate.

If there are large differences in the level of company taxation, the actual criteria for decision-making can be pushed into the background and tax savings can be focused. If the current trend of the tax rate is considered, it is obvious that besides the clear downward trend, the gap between low-tax countries and high-tax countries is still present. The criteria and the resulting competition for tax attractiveness calls for action by governments.

And so the concept of a Global anti-Base Erosion proposal (GloBE) was conceived in 2019. It is based on two pillars. The first pillar focuses on the allocation of taxing rights and postulates new rules for the allocation of profits and for the definition of new tax connecting factors in the source or market state (Lips, 2019).

The second pillar in turn deals with the introduction of a global minimum taxation. It deals with the optimization of taxation in the EU. Minimum taxation consists of two core ideas, which are broken down into Income Inclusion Rule and Tax on Base Eroding Payments. The former rule refers to the right to equalize and top up the tax burden of foreign subsidiaries and permanent establishments to the tax burden of the domestic company up to a minimum tax rate. For example, if the minimum tax rate were 15%, the parent company would be domiciled in Germany and have a 100% subsidiary in Bulgaria. Then the German parent company would have to bear the reduced tax burden of its subsidiary. This means that the difference between the current taxation in Bulgaria above 10% and the minimum taxation of 15% would be taxed by the German parent company.

The Income Inclusion Rule applies only to foreign profits that are located in the home country. Therefore, this rule needs to be extended by the Tax Base on Eroding Payments, which regulates the domestic profits of foreign companies. This is intended to prevent profits from high-tax countries being regularly shifted to countries with low tax rates (OECD, 2019).

For the first time in many decades, the problem of reducing corporate income tax rate is being addressed. The minimum tax burden would probably prevent future investments in low-tax countries due to tax savings. However, tax havens could be created in other ways, for example by countries above the minimum tax rate investing in countries subject to the minimum tax rate. This could lead to tax savings, which are no longer as high, but should not be underestimated.

When introducing this initiative, it should be borne in mind that the cost of compliance with tax regulations would increase significantly and that compatibility with higher-ranking legislation is not yet clear. The determination of the tax base would not be regulated either, which would result in a different determination, which would lead to the distortion of uniform tax rates. The present proposal still has a number of gaps in the design of the regulations, so that a final criticism is not yet possible.

#### 4. Conclusion

In order to curb unfair tax competition, there have been numerous different measures and initiatives, especially since the end of the 1990s, at both the EU and OECD levels. These range from Codes of Conduct in the sense of a mutual commitment to create and maintain a fair system of competition, to measures to increase tax transparency, to the adoption of a directive to combat tax avoidance practices. The comprehensive measures to restrict tax competition suggest that the need for action will be pursued in the long term. The many different measures and initiatives also make it clear that the one correct solution or reform has not yet been found. In most cases, the effectiveness of the countermeasures is not sufficiently assured because, on the one hand, they are not legally binding and, on the other hand, they have not yet targeted the driving problem of tax rate reduction. With the presentation of the GloBE initiative, the competition of the tax rate could be curbed. With the CCCTB concept, the European tax base could be adjusted. Thus, individual components of taxation are improved, but not an all-encompassing concept. A combination of GloBE and CCCBT would be an alternative, which should be examined. Extensive research is needed on the impact on Member States.

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## DEFENCE SPENDING IN ROMANIA COMPARED TO NATO COUNTRIES FROM THE FORMER EASTERN BLOC

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**Abstract:** *Ensuring the state of normalcy in our country is fulfilled by the Romanian state, being its duty to its citizens. This state of normalcy requires the non-stop operation of institutions that are particularly important to any state, especially a member of the European Union and the North Atlantic Treaty Organization. 14 states out of 30 NATO members were part of the former Eastern Bloc, our country included. What is Romania's position in the ranking of these countries and how important is the allocation of defence funds for the government? We try to answer this question by studying the literature for the field of research and by analysing the data provided by Stockholm International Peace Research Institute.*

**Keywords:** public spending, military, NATO, public finances, military expenditure, Eastern Bloc

**JEL classification:** H83, E60.

### 1. Introduction

Within the public needs, the defence needs of the country represent those public needs of the state that it forms in connection with its mission, according to its own military doctrine, to defend its independence, integrity and sovereignty (Florişteanu, 2007). The role of key factor in promoting and protecting national security values, interests and objectives, as well as counteracting any type of threat or aggression of a military nature, by using specific action modalities of armed struggle, gives national defence fundamental values in Romania's general security context (Udeanu, 2012). Among the missions of the Romanian Army are the allied and national defence, the contribution to international stability - regional and global, but also the support of the country's population in case of calamities or emergencies. In recent years, the global economic and political context has influenced the organization and functioning of national armies; it is not an influence on the volume of necessary expenses, but it is an orientation towards an army "less numerous and more professional" (Marinescu, 2009). The case of Romania is found in this idea supported by to Radu Titus Marinescu, especially in the context of joining the North Atlantic Alliance. The preparation of the defence budget presents unique challenges, which are not found in the preparation of other types of budgets (McCaffery, 2004). Usually, military expenditures are considered as consumption of gross domestic product, unproductive expenditures. Viewed from this angle, they must show a downward trend, which already exists in many states. It is important to note that the level of these expenditures also depends on

international factors. These factors are not always conducive to reducing defence budgets. A feature of defence spending is the fact that they are financed from the state budget. However, the Ministry of National Defence can also receive funds from NATO or the European Union. By participating in missions abroad, Romania's image is improved, in terms of contributing to ensuring a state of stability in the international environment, and also increases the professionalism of the Romanian Army in the context of participating in real missions in theatres of operations. However, this is directly influenced by the political factor (which approves the participation in external missions) and by the financial factor, depending on the budgetary appropriations provided for the corresponding subchapter in the State Budget. In practice, the budgetary allocations for defence are used for "national defence" are generally used to finance the 3 major categories of forces of the Romanian Army: Land Forces (with the largest share), Naval Forces and Air Force. Currently, NATO has 30 member states, of which 14 are former Eastern Bloc countries, in this case the countries under the influence of the former USSR. Three countries, the Baltic states, Estonia, Latvia, Lithuania, that were part of the Soviet Union, joined NATO in 2004, along with Romania. All 14 countries have joined NATO since 1999, representing the most recent Alliance states. The NATO member states of the former Eastern Bloc, in order of joining the Alliance are the Czech Republic, Hungary, Poland, Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia, Albania, Croatia, Montenegro and North Macedonia. North Macedonia represents the state with the most recent accession in the Alliance, on 27 March 2020 it became NATO's 30<sup>th</sup> member. Romania's accession to NATO in 2004 was one of the most important moments of the post-communist era, of equal strategic importance with the accession to the European Union.

## **2. Research methodology and dataset**

The general purpose of the research is to evaluate Romania's position among the other 13 former Eastern Bloc countries, now NATO members, regarding military spending. The study is based on the processing of information provided by the Stockholm International Peace Research Institute, an independent international institute dedicated to research into conflict, armaments, arms control and disarmament, established on the basis of a decision by the Swedish Parliament. SIPRI Military Expenditure Database provides information on the defence expenditure of all countries in the world, from 1949 to the present, in terms of budget allocation, share of GDP and allocation per capita.

## **3. Romania's position among NATO members from the former Eastern Bloc regarding defence spending**

In 2019, 1,870 billion dollars were spent worldwide for the military, in this case this amount represents the total budgets of the ministries of defence of all countries in the world. The largest share is represented by the USA, which has allocated over 731 billion dollars to the national defence, which translates into 39% of total defence spending in the world. By comparison, Romania's GDP is \$ 249 billion, according to the information published by the World Bank. The military expenditure of the 14 NATO countries from the former Eastern Bloc amounts to 30 billion dollars.

**Table 1:** Defence spending of NATO countries from the former Eastern Bloc

States	Military expenditure (in US \$m)	Share of GDP	Per capita (in US \$)	Share of Govt. spending
Albania	197.5	1.3%	68.6	4.3%
Bulgaria	2,127.1	3.2%	303.9	8.4%
Croatia	1,009.2	1.7%	244.3	3.6%
Czech Rep.	2,910.3	1.2%	272.3	2.9%
Estonia	656.1	2.1%	494.9	5.3%
Hungary	1,904.4	1.2%	196.6	2.6%
Latvia	709.8	2.0%	372.3	5.6%
Lithuania	1,083.7	2.0%	392.7	5.9%
Montenegro	89.3	1.6%	142.2	3.6%
North Macedonia	151.2	1.2%	72.6	3.7%
Poland	11,902.5	2.0%	314.2	4.7%
Romania	4,945.0	2.0%	255.4	6.1%
Slovakia	1,865.2	1.8%	341.8	4.3%
Slovenia	568.7	1.1%	273.6	2.7%

Source: Stockholm International Peace Research Institute, <https://www.sipri.org/databases/milex>

As can be seen from Table 1, Poland allocates the largest defence resources among all 14 member states, followed by Romania in second place. This ranking is logical, given that Poland and Romania are the largest of the 14 countries, considering population and area, criteria directly proportional to the size of the army. The country with the fewest funds allocated to defence is Montenegro, with only \$ 89 million allocated to the military. So, analysing only the gross allocation of resources for defence, Romania is the second country in the former communist bloc, having the second strongest army among the 14 countries. The most important criterion that reveals the performance of military structures is the allocation of resources per capita, because here the variables regarding the size of the country are excluded. The Baltic countries pay the most attention to the performance of their armies, being the first three in the ranking of budget allocation per capita, as follows: Estonia, with \$ 494.4, Lithuania with \$ 392.7 and Latvia with \$ 372.3. This concern is because they are neighbouring countries with Russia and the tensions in this area are quite high, NATO and Russia organizing large-scale military exercises at the border. The countries in the last places are three former members of Yugoslavia, namely Albania, North Macedonia, and Montenegro. This low allocation is also a result of the fact that the countries are poorer than the other eleven, being the only ones that are not members of the European Union. Romania's position is quite fragile in terms of per capita, ranking only 6th out of 14, but even if Romania is in the second half of the countries regarding this criterion, our country still has a powerful and performant military. The 14 NATO member states, states of the former Eastern Bloc, have allocated an average of 1.78% of GDP for defence. The requirement of the U.S.A., the most

important force in the Alliance, is that the other 29 member states allocate at least 2% of GDP to the military endowment. This requirement is met by 6 states, specifically the Baltic countries, Poland, Bulgaria, and Romania. In a democratic environment, there are cases of consensus for the adoption of a certain program, as was the case for the allocation of 2% of GDP to the army budget, for a period of 10 years, starting with 2017 (Mardale, 2017). So, Romania will continue to allocate 2% of GDP for defence in the future, which indicates that Romania will have a more modern and stronger army in the next period. As a share of total government spending in a year, Romania ranks 2nd in the ranking of 14 countries, after Bulgaria, which allocated 3.2% of GDP and 8.4% of total government spending on defence. Romania's percentage of 6.1 is considerable and indicates that the Romanian authorities pay more attention to meeting the performance standards imposed by NATO membership.

#### **4. Conclusions and further research**

Romania, through its massive allocations for the military field, proves once again that it has a professional and respected army within the Alliance, being the second country out of the 14 states in the former Eastern Bloc in terms of gross resource allocation. Also, as a percentage of total public spending, Romania is also in second place in the ranking, demonstrating the importance that the political factor attaches to our country's membership in the North Atlantic Alliance. Another gratifying fact is the constant allocation of 2% of GDP for defence, a large part of this amount being directed to modernization and investment. Using the information provided by the Stockholm International Peace Research Institute, future research should examine the evolution of NATO member countries' defence spending from the former Eastern Bloc, starting with the periods when they were in the Soviet Union's area of influence, then continuing with the transition period from communism to the status of NATO member countries.

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## HOW DOES ECONOMIC AND FINANCIAL CRIME INFLUENCE ILLEGAL DEFORESTATION?

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**Abstract:** *Corruption in forestry is a serious problem, especially in developing countries, which are the hardest hit. In their case, the massive deforestation of forests leads to the maintenance of poverty by depriving these states of an important source of income. In addition to economic losses, corruption in forestry severely affects the environment. The forms that corruption takes in the field of forestry are varied. On the one hand, we have high-level corruption, with politicians deciding who will be given land, fraudulently awarding contracts to their friends and relatives, and allowing logging without the necessary permits. On the other hand, corruption at a lower level is also prevalent, by deliberately ignoring the cutting of trees and the illegal transportation of cut wood. Fraud is one of the forms that corruption takes in forestry. Every year, some of the funds earmarked for forest protection are stolen and often used to destroy them. There are also cases of bribery and influence peddling, especially in forest exploitation contracts and land concessions. But what are the causes for all of these?*

**Keywords:** forestry crime; corruption; illegal deforestation; financial crime; fraud.

**JEL classification:** D73, G00

### 1. Introduction

In the first half of this year, more than 4,000 criminal cases were registered in Romania for forestry offenses and more than 51,000 cubic meters of wood were confiscated without legal documents (Agent Green, 2020).

Globally, the largest forest losses are recorded in Brazil, the Democratic Republic of the Congo, Indonesia, Malaysia and Madagascar. Frances Seymour (2018) of the World Resources Institute, who created Global Forest Watch, argues that the main reason tropical forests disappear is not a mystery, but is closely linked to soybean crops, palm oil, timber and other global commodities. She strongly claims that many of these deforestations are illegal and associated with corruption. She also says that only 2% of global climate funds are intended to protect forests, although it is known that one of the main causes of climate change is the sharp decline in forested areas.

### 2. Research Methodology

The aim of the paper is to identify the causes of illegal deforestation, especially the study of the influence of economic and financial crime, through corruption and the level of the underground economy, on illegal logging.

The research objective is to identify as many causes as possible, with a significant influence on illegal deforestation, by analysing the academic literature dealing with this topic. So the research method used is the analysis of secondary data, because the study aims at defining the problem and the general framework.

The importance of the study is given by the fact that once these processes and phenomena of inter-causality and inter-dependence have been explained and understood, governments, regional and local authorities can take truly effective measures to reduce the level of illegal deforestation, to limit corruption in forestry and thus to reduce the level of the underground economy. When illegal deforestation reaches a minimum threshold, its negative effects will be drastically reduced, and countries will be able to enjoy a much higher quality of the environment, and thus a high quality of life.

### **3. Types of Analysis**

In terms of general knowledge about the processes, mechanisms, trends and causes of the economic and financial crime, Achim and Borlea (2020) describe corruption as a key component of this type of crime, along with shadow economy and money laundering.

The specialized literature is not very tender in the analysis of the influence of economic and financial crime on deforestation. Most research is descriptive, analysing the phenomenon of illegal deforestation and corruption of civil servants only from a theoretical and social point of view, without presenting a practical, quantitative approach. The analysis and correlation of some data, some figures, and the measurement tests are timid and inconsistent. Also, most studies on this topic focus on the Amazon forests, Indonesia, Ghana, Brazil, and Tanzania.

*Analyses based on interviews* were conducted by various researchers. For example, Pellegrini (2004) notes that in Pakistan forest officials allow illegal logging to obtain a larger volume of timber than the legal limit. A "wooden mafia" is well infiltrated politically and pays bribes to allow timber trafficking. Robbins (2000) manages to gather 162 interviews with Indian foresters and concludes that corrupt practices allow certain local barons to circumvent forest laws and clear forests beyond permitted levels.

Another category of research is based on the *analysis of other studies*. Maina (2018) discovers from previous research that corruption has the potential to decimate a country's forest and states that there is an urgent need for studies to provide additional explanations as to the extent to which corruption contributes to the continuous decline of forest area in the context of reforms to improve the performance of the forestry sector. Callister (1999) made a number of recommendations to the World Bank, including the establishment of a working group against illegal forestry activities and the establishment of an alliance between the World Bank and the World Wide Fund for Nature.

The third category of research papers is based on *the creation of mathematical models*. Thus, Mendes, Junior and Tourrucoo (2016) show that the government's strategy of using a constant salary scheme can increase the possibility of giving and taking bribes. The mathematical model created proves that the salary paid in the public sector can be an important tool in combating deforestation in developing countries. Lopez and Mitra (2000) reach a major conclusion: regardless of the type of interaction between the firm and the government, for any level of income per

capita, pollution levels are always above the optimal level from a social point of view.

There is also a category of research based on *benchmarking, case studies, or other methods of processing secondary data*. For example, Tacconi, Rodrigues, and Maryudi (2019) compare logging policies in Brazil with those in Indonesia and note that, unlike Brazil, Indonesia does not appear to have a centralized and strategic approach to law enforcement. The application of Indonesian forest law could significantly benefit from a careful examination of Brazil's experience, not by copying, but by adapting to the specific context. Fadli and Purnomo (2019) conduct research in Indonesia by studying a set of laws and show that holders of large sums of capital have influence in politics, which leads to legislation that favours individual interests to the detriment of the well-being of the low-income population. The integrity of regional leaders determines the degree of corruption in a region. It is therefore recommended that the government ensure the integrity of regional leaders and maintain an internal commitment in all areas to eradicate corruption.

If these articles did not discuss the topic of interest exactly, however, three articles were identified that address the topic directly.

Ferreira (2004) builds a sample of over 90 countries for the period 1990-2000 and studies the relationship between deforestation rate, as a dependent variable, and contract repudiation, risk of expropriation, corruption, the rule of law and bureaucratic quality, as independent variables. The control variables used are the intensity of trade, the gross domestic product per capita, the population density, the price of wood, the length of the coast scaled on the land surface and the length of the roads. The author demonstrates that trade liberalization has negative effects on the forested area when corruption is widespread.

Cornelis van Kooten and Wang (2003) study 117 countries to demonstrate the relationship between the average annual deforestation rate, as the explained variable, and gross domestic product, forest exports, agricultural production, OECD membership, capital market, property rights, currency diversity, government size, corruption, literacy rate and rural population. The results provide a solid basis for saying that as per capita income grows, so does environmental degradation in an effort to increase growth, but beyond a certain level of income, the natural environment improves due to citizens seeking higher environmental quality.

Koyuncu and Yilmaz (2008) use a sample of over 100 countries from 1980-2000 to study the relationship between deforestation, as an explained variable, and corruption, rural population growth, cropland area, and gross domestic product growth, as explanatory variables. Research clearly shows how corruption has a positive effect on the rate of deforestation. Therefore, policies and measures taken to reduce corruption will help reduce illegal forestry.

#### **4. Conclusions**

Many limitations of these studies can be observed. Some of them use too small or very specialized samples, others only use data from 20 years ago. Many researches study related, broader or tangential topics to the subject of illegal deforestation, and the vast majority do not use control variables and do not consider the division of countries into certain categories, for example developed countries versus developing countries. Thus, given the limited research base on the topic of illegal deforestation, the limitations of building the data base, of

measuring the variables, but also their modest results, the need for complex and high-quality research is urgent, in the context of massive loss of wood in the last 30 for years, which directly and substantially affects the quality of the environment and, ultimately, of our lives.

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## **ANALYSIS OF THE NORTH-WESTERN REGION OF ROMANIA IN TERMS OF SUSTAINABLE DEVELOPMENT AND CONTRIBUTION OF COMPANIES**

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**Abstract:** *In the analysis of the existing situation at national, regional and county level, the main aim was to interpret the values of indicators that would lead to the contribution of companies to sustainable development, regardless of their size and area of business, in order to remain competitive on the market and to respond to the increasing expectations of their customers. The qualitative research methods used were: observation, comparison and analysis of data from North-Western part of Romania, over the period 2012-2019, data provided by the National Institute of Statistics. After comparing the evolution of the macroeconomic indicators between regions, and then between counties, the results showed that the North-West region is in a continuous development, the indicators are in a favourable trend, placing the region on the second place as of development, after the Bucharest-Ilfov region, being strongly influenced by the contribution of Cluj county, and companies have an important contribution to the sustainable development of the area, in partnership with the public administration.*

**Keywords:** development, sustainable, indicators

**JEL classification:** Q01; E24; L29; O10; R11

### **1. Introduction**

There are a lot of definitions and explanations of what the sustainable development is but the one that became popular and is widely used was developed in 1987 in a document prepared by the United Nations' World Commission on Environment and Development, chaired by the Norwegian former prime minister Gro Harlem Brundtland (known as the Brundtland Report), stating that the sustainable development is meeting "the needs of the present without compromising the ability of future generations to meet their own need" (Zhivkova, 2019).

Sustainability of the firm can also exist when it creates value for its shareholders by increasing the positive and minimizing the negative effects on environmental, social or economic issues (Krechovska and Prochazkova, 2014).

### **2. Literature review**

In the context of technological transformation, issues related to sustainable development are becoming increasingly important and there is an on going debate about the importance and application of sustainable development in a business environment.

Determination of economic indicators in the context of corporate sustainability performance is a subject analysed by Dočekalová (2015) who did a research among manufacturing companies in the Czech Republic. Correlation analysis and factor analysis were applied in order to eliminate information duplicity and dimensionality reduction. The result is a reduction in the number of economic indicators creating a good and balanced set of simple indicators.

Surd et. all (2011) analyses the discrepancy between the Bucharest region and the other regions, with the help of a set of indicators able to show the situation of the region from a metric point of view, but also from the attribute point of view (GDP/inhabitant, share of population with higher education, etc ).

Zvorych (2017) in studied the influence of the small business development on the economic development of the region. The results shows that small business has the greatest influence on the sectorial structure of the territory and on the employment level of the population, and the smallest on the infrastructure and the ecological state of the region.

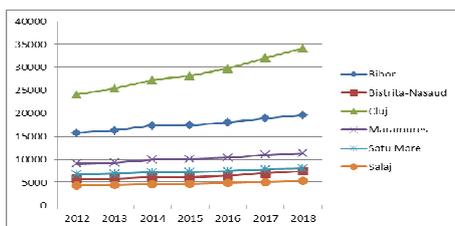
Droj et. all (2017) analysed if inter-regional development differences are important or not, when accessing European funds. In the study was used several indicators that can prove the sustainability of the programme, and the results showed that in Cluj and Bihor beneficiaries increased their competitiveness obtaining better financial results and creating new jobs.

### **3. Methodology and results**

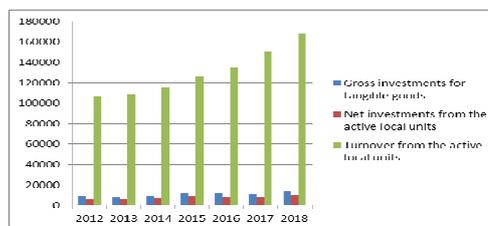
The methodology used in this paper includes qualitative research methods like observation, comparison and analysis of macroeconomic indicators, the sustainable development idea trends and the response of the companies from North-West of Romania to these trends over the period 2012-2019, from data provided by the National Institute of Statistics.

#### **3.1. The evolution of main indicators in period 2012-2019**

In terms of regional economy, the North-West region ranks second in Romania in terms of *the number of active enterprises* (14,85%) after Bucharest– Ilfov (24,65%) and the trend is increasing; Cluj county is on the first position (39,73%) followed by Bihor (22,85%). Grouped by *size classes of number of employees*, most enterprises are those with 0-9 employees, representing 90,09% of the total active enterprises; at the opposite pole being large enterprises with over 250 employees, representing 1% of the total. According to the *average number of employees*, in the Nord-West region, in 2019, most employees were reported in the manufacturing industry (28,76%), in trade (16,19%) and construction (7,66%), and the counties with the *highest employment rate* are Cluj (33,95%) and Bihor (23,44%).



**Figure 1:** Number of active enterprises by counties  
Source: Processed data extracted from INSSE



**Figure 2:** Contribution of companies from NV, in terms of turnover, net investments and gross investments for tangible goods.  
Source: Processed data extracted from INSSE

The *turnover* achieved by the active enterprises places the region on the fourth rank in 2018, after Bucharest-Ilfov, South-Muntenia and Center, but the evolution is favourable; an important contribution is made by the county of Cluj (41,15%), followed by Bihor (22,75%). The other counties have a slower growth. Depending of *size class and number of persons employed*, the highest *turnover* has the enterprises with 10-49 employees, and by *activity of national economy*, the highest turnover has the wholesale and retail trade and the manufacturing industry.

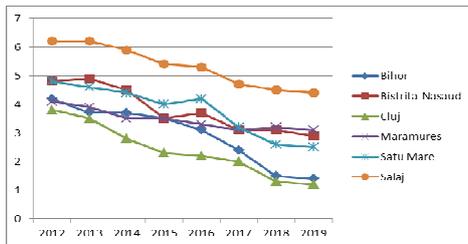
In terms of *net investments and gross investments* for tangible goods, the region of North-West is on third place, after Bucharest-Ilfov and Center, but in an increasing trend and the ranking is led by Cluj County as well. SMEs and micro-enterprises represent over 90% of the total active enterprises in the counties of the region, generating over half of the turnover and investments.

Depending on the *type activity of national economy*, the largest number of active enterprises are in the field of trade (26,29%), followed by transport and storage (11,93%) and construction (11,71%); at the opposite pole being production and distribution of electric and thermal energy, gas and warm water and conditioning air with 0,22% of total active enterprises.

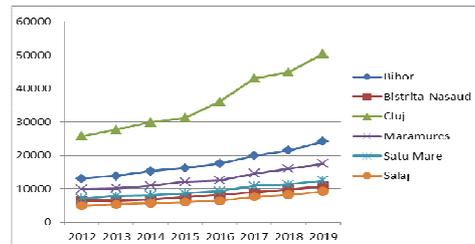
In the period 2012-2018, the North-West region ranks second after the Bucharest - Ilfov region in terms of the *rate of creation of newly created active enterprises* but the trend is decreasing.

According to the *unemployment rate*, the North-West region is on the third place after the Bucharest - Ilfov region and the West region, and the trend is decreasing.

In the North-West region, the lowest unemployment rate in the period 2012-2019 was in Cluj county, followed by Bihor, Satu Mare, Maramureș, Bistrița-Năsăud and Sălaj.



**Figure 3:** Unemployment rate by counties  
Source: Processed data extracted from INSSE



**Figure 4:** GDP by counties  
Source: Processed data extracted from INSSE

Depending on the *Gross Domestic Product (GDP)*, the North-West region is located third (11,97%) after the Bucharest – Ilfov region (26,57%) and South – Muntenia (12,25%). The highest value of GDP in North-West Region is in Cluj county (40,49%), followed by Bihor (19,38%), Maramureș (14,09%), Satu Mare (10,03%), Bistrița-Năsăud (8,62%) and Sălaj (7,38%).

### 3.2. Involvement of companies in sustainable development

In the following I have described the objectives of three companies from North-West of Romania, selected on the criterion of their listing on the Bucharest Stock Exchange and based on their contribution to regional development.

In Bihor, according to the annual report of S.C. Felix Tourism S.A. from 2019, the policies of responsible management and sustainable strategies adopted within the company aim at: minimizing the negative impact of the activities carried out on the natural and social environment; generating economic and social benefits of the local community; improving working conditions; conservation of natural heritage.

In Cluj, the representants of CEMACON S.A. have established a path based on a sustainable growth, which is based on the following core values: innovation: constantly investing in technology and research to develop unique and evolved products; creativity: seeking inspiration in the life and in the activity of their clients; performance: for their shareholders and for their clients through company's results and attitude; environment: using natural materials to manufacture their products and encouraging green building solutions.

The TeraPlast Group from Bistrița-Năsăud is actively involved in the development of sustainable systems, and within the Research and Development Center, research activities are carried out annually in order to improve existing products and to obtain new products.

### Conclusions

The evolution of the main economic indicators in the North West region indicates a slow but steady growth in the period 2012-2019, especially in terms of the number of active enterprises, turnover, GDP and the number of employees. In 2019, most employees were reported in Cluj County, and in terms of the number of employees, most are in the manufacturing industry. The economic performance of the North-West region is supported by the large concentration of companies, so that the number of active enterprises in the North-West region, especially in Cluj and Bihor

county indicates an increased capacity to support economic development, occupying the second place after the Bucharest-Ilfov region. The turnover achieved by the active enterprises places the region on the fourth rank, but the evolution is favourable.

SMEs and micro-enterprises represent over 90% of the total active enterprises in the counties of the region, generating over half of the turnover and investments, having the capacity to generate economic growth and to capitalize the existing entrepreneurial spirit and local resources.

The conclusions of this paper opens new research directions starting from the hypothesis that sustainability has the potential to influence the performance of a company.

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## THEORETICAL BACKGROUND OF TAXATION PROCESS

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**Abstract:** The topic of this research focuses on the study of the taxation process, which is one of the oldest activities in human history and has played a key role in civilized societies for thousands of years, developing its roots with the emergence of the state and trade relations between people. The research methodology is mainly based on the method of theoretical research and the method of studying the literature, being mainly qualitative research, designed to provide a generous substrate in addressing the process of taxation in economic life. Thus, this theoretical research aims to briefly cover the most important historical stages of taxation, in order to provide a comprehensive definition of the concept of tax. This article concluded that over time, the concepts of taxation have evolved and been transmitted to other cultures, where, later, fiscal ideas took root. This model continues to this day, as nations are influenced by the evolution of taxes in other countries, which are perceived in order to cover the financing needs of the state, in order to achieve the primary objective, namely economic stability. The value of the obtained results can be quantified by broadening the spectrum of theoretical research in this area and providing a significant increase in knowledge in the fiscal literature.

**Keywords:** taxation; fiscal system; historical evolution; theoretical approach.

**JEL classification:** H20; N00

### 1. Introduction

This research is divided into four sections, namely *section one*, which includes the introductory part, which briefly presents the research objectives, research methodology and the central topic of the study. Starting from the fact that the taxation process is one of the oldest activities in human history, which has played a key role in civilized societies for thousands of years, developing its roots with the emergence of the state and trade relations between people, the *second section* refers to the presentation of the historical evolution of the fiscal systems. The *third section* considers the study of the concept of tax and its characterization, and the *last section* of this study is represented by the presentation of the main findings.

This study is a first step in discovering the influence that history has in shaping modern tax systems, and the approach of taxation as a clear proof of civilization, can provide significant theoretical resources for the literature. Thus, the actuality of this study is conditioned by the importance of taxes in the economic life of nations. Achieving the main goal of this theoretical and qualitative research, respectively offering a comprehensive definition of the concept of tax starting from its historical roots, is based on the extensive study of the literature.

## 2. The historical evolution of fiscal systems

Taxation is evidence of civilization and tax systems were developed independently in the great ancient empires. Concepts on taxation have evolved and been transmitted to other cultures, which subsequently took root the tax ideas.

According to Samson (2002) during *the Egyptian Empire (1000-300 BC)*, the king's own resources were not sufficient to secure the lives of his priests, court and army, so he had to resort to taxes. Since the use of money was still rare, most of these tributes were paid in kind. Thus, the peasants who made up the majority of the population had to bring to the king a fixed proportion of their crops.

*Ancient Greece (500 BC)* was a nation that had a lot of wars, and they used taxes to finance them. A unique feature of the Greek fiscal systems was their ability to cancel a tax once the war ended, and if too much money was raised from these taxes, they returned the surplus funds back to the citizens (Petraakis, 2019).

The Bible refers to taxation, by recalling the disciple Matthew, who was a tax collector of the local government in Rome, under the leadership of Caesar Augustus. The period of the *Roman Empire (27 BC - 800 AD)* was characterized by a dramatic fiscal burden, in which there were laws on the obligation of the people to continue the work of the field, as well as the realization of trade, so that donations to the administration to can not be avoided (Smith, 2015).

The emergence of the feudal system in *medieval Europe (1000-1700 AD)* imposed the principle that everyone, from peasant to duke, had to provide military service or work in exchange for the right to his land. Thus, in feudal Europe, the two main forms of wealth were land and labor. Labor was used as currency, in the form of military service, and the wealth of a feudal lord was measured by the size of his land holdings. The fiscal systems of *early modern Europe (1700-1900 AD)* did not change much until the French Revolution, and governments, in order to obtain higher incomes, largely increased taxes on specific goods, called excise duties and customs, internal and external.

Regarding Romania, the most valuable fiscal reform instituted was carried out by the Organic Regulation of 1831, which stipulated new provisions regarding the abolition of internal customs between principalities, the collection of revenues and the adjustment of public expenditures, by including modern administrative regulations of the country's budget and the creation of a National Bank.

An important event of the twentieth century was the Great Depression of 1930, characterized by an increased level of unemployment and a decreased level of productivity, phenomena that led, consequently, to significant decreases in government tax revenues. Keynes's ideas of 1936 change the role of government and the use of taxation and fiscal policy to manage an economy. In his paper, Keynes suggests that the government should intervene in the development of the national economy by adopting proactive fiscal policies, such as increasing fiscal expenditures, reducing taxes and issuing government bonds, to increase fiscal budgets for housing, roads and other public projects (Chen, 2020).

Therefore, throughout history, the taxation process has known a path with ups and downs, being difficult to find its precise origin, because the state, regardless of its form at one time, has always been looking for financial support, either from its citizens, either from those who crossed its borders. As the section presented shows, *the current fiscal systems are the product of a long evolution, marked by important historical events*. Given this, it is not surprising that they vary widely from state to state.

### 3. The essence of taxes

The fiscal system, through compulsory levies, plays a complex role in any state, being one of the pillars of influencing the economy. Given that fiscal levies are the basic components of fiscal revenues and they are levers in the formation of budget revenues, it is necessary to approach them conceptually, so that the main purpose of this paper to be achieved. Broadly and unanimously accepted, the *tax system includes all mandatory levies, intended to participate in the formation of public fiscal resources of the state.*

It is very important to differentiate the notion of compulsory levies from that of fiscal levies. According to the specialized literature, the compulsory levies represent "the totality of taxes, fees and contributions levied on the public budgets component of the general consolidated budget", and the fiscal levies represent the totality of taxes and fees "which determine revenues at the state budget and local budgets" (Dobrotă & Chirculescu, 2010).

Taxes and fees, in essence, are not different, but the vision on them depends very much from one state to another, but also from one person to another, depending on the social, economic and cultural level in which they are. The study of taxes and the taxation process is not a new one, but it is very long, and over time many and different opinions have been addressed. It is very important to have a common definition of the term tax, and the definition that encompasses the basis of the concepts in the literature is *that taxes and fees are the backbone in the collection of public revenues, but they are not limited to their financial function.*

In the autochthonous literature of the last two decades, taxes are unanimously recognized as "a form of mandatory and final collection of a part of the income and/or wealth of individuals and business entities, in favor of the state budget, in the amount and within the deadlines established by law, in order to cover public expenditures and without the obligation on the state part to provide the taxpayer with a direct equivalent" (Comaniciu, 2010; Ungureanu et al., 2017, Vodă and Dobrotă, 2018). Based on studies undertaken over time, which provide many definitions of taxes, *four key issues can be identified*, which we believe that we need to understand, so that taxation can perform its functions in any society:

- *firstly*, the tax represents a payment, price, donation, contribution of the citizens to the public authority;
- *secondly*, it is an obligation, a constraint made to subsidize public spending and services provided by the state, but in modern tax systems, the tax we consider should be seen as an agreement between the state and taxpayers to achieve the common good;
- *thirdly*, the payment of the tax cannot be equivalent to the benefits received, it is without consideration from the state;
- *fourthly*, the tax is seen as an instrument, an economic and social regulatory intervention.

### 4. Conclusions

The present theoretical study refers to the taxation process, in general, starting from its historical roots, and continuing, specifically, to approach the concept of tax in the contemporary period.

Consequently, in the early period of time, *taxation* was either a *price* to be paid for protection, in particular for financing military movements, or a *tribute* to the central

government, simply because people were members of an organized society. A good fiscal structure plays a multiple role in the process of economic development of any nation, taxes having a historical, binding, regulatory, legal and transparent character.

In conclusion, from our perspective we can define the *concept of taxation*, on the one hand, as representing the instrument of fiscal policy, used in order to intervene in the regularization of the economic and social plan of a state. And, on the other hand, we can say that *the tax* is the main element of public revenue formation, with a long historical character, which is the mandatory financial compromise on the part of the taxpayer, for the benefit of the public budget and whose amount and payment term is established in advance, by legislation, with the purpose of financing government expenditures, but also of intervening in the fulfillment of national economic, social and political objectives, without being a direct compensation, from the state, for this sacrifice.

Basically, taxes are the *compromise that taxpayers are willing to offer, in order to benefit from public goods and services, which they use everyday or occasionally.*

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## THE IMPACT OF SOCIAL RISK ON BUSINESS SUSTAINABILITY

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**Abstract:** *This paper emphasizes the need to adopt the business strategies of economic entities, significantly influenced by non-financial risks associated with social, political, environmental and governance factors. Awareness and integration of these risks in business and risk management strategies is the premise for ensuring the necessary conditions for prudent and continuous development of companies, as well as minimizing the potential impact of risk factors. The paper concerns the sustainability of business in terms of social factors and, implicitly, social risk on two levels: from a microeconomic point of view (at the level of the activity of economic entities) and macroeconomic (at the level of the entire economy).*

**Keywords:** social risk, sustainability, coronavirus, banks

**JEL classification:** Q56, D91

### 1. Introduction

Humanity is facing the emergence and accentuation of the limitation of natural resources, in a period marked by pandemics, demographic changes, globalization, digitalization, with a significant impact on the economy and society. The emergence of the coronavirus pandemic, severe climate change, environmental pollution, reduction of biological diversity require long-term strategic orientation and coordination. The issue of sustainable development of the company involves the achievement of a balanced economic growth, given the existence of social, political, economic, environmental and governance vulnerabilities.

Defining and implementing a sustainable business model leads, in addition to obtaining financial profit, to the use of alternative ways of achieving strategic objectives and increasing the degree of satisfaction of consumer needs, while respecting the principles of sustainability. At the same time, the creation of an appropriate framework for the assessment and management of non-financial risks allows the substantiation of an appropriate risk profile.

The importance of addressing social, environmental and governance risks, due to their significant long-term impact on the economy and society, was understood in particular after the global financial crisis of 2008, a period defined by disruption and stagnation of economic life.

### 2. Business sustainability and social risk

Rethinking the business model, often in a radical way, in order to adapt to the principles of sustainable growth, involves major changes in the entrepreneurial

approach for business development and the revision of the traditional risk management framework and non-financial risks caused by social, political, economic, environmental and governance developments.

The importance of implementing social, environmental and governance factors was addressed by Nițescu and Cristea (2020), who show that at the Romanian banking system there is interest in defining and implementing effective management in terms of sustainability risk, in order to ensure the conditions necessary for continuous development, by identifying and properly assessing the specific risks, starting from the social, economic and environmental vulnerabilities we face.

If the need to incorporate environmental, social and governance (ESG) risks into risk management strategies has been the subject of extensive studies and research, in the context of the period we are going through, a similar approach to the risks posed by the coronavirus pandemic is essential, negative impact on economies around the world being major, especially since social and political risks were already rising in a number of countries and regions some time before the outbreak of the Covid-19 pandemic.

For any field of activity, human capital is essential.

### **2.1 Social risk at macroeconomic level**

Poor long-term political and economic management has degenerated into anti-government protests in countries such as Venezuela, Argentina, Iran, Hong Kong, Lebanon, Ecuador, Chile, Bolivia and Colombia, with a rapid effect on acceleration, in a brutal way, of macroeconomic imbalances, aggravating the difficult existing social context. The intensity of the disturbances in the emerging countries with a high level of income (Chile, Hong Kong) and in the developed countries surprised the markets.

The Yellow Vest movement against fiscal austerity in France, started towards the end of 2018, has shown that, in addition to the general level of economic development of a country, income distribution, changes in social protection, subjective perceptions of governments and institutions with a decisive role on social risk are important.

Social demonstrations were halted in early 2020, with the outbreak of the Covid-19 pandemic that imposed strict containment measures, but with the gradual opening of national economies, widespread social unrest emerged as a result of the impact of the pandemic crisis, generated by the actions and approaches of the authorities during the quarantine and alert periods, which led to the aggravation of health problems, the increase of unemployment and prices, the accentuation of the deficit of fiscal resources.

Euler Hermes and Allianz (2020) created the Social Risk Indicator (SRI), which identifies the degree of vulnerability of states to systemic social risks, which can significantly change a country's development strategies and policy making, at the macroeconomic level, as well as strategic objectives of economic entities, at the microeconomic level.

The SRI measures strengths and weaknesses, as well as perceptions of the political, institutional and social environment, ranking countries on a scale from 0 (high risk) to 100 (low risk).

In the context of the current recession in the world economy caused by the coronavirus pandemic, Euler Hermes and Allianz (June 2020) made a ranking of countries with a high degree of escalation of social discontent, which indicates a

minimum level of social risk for countries such as Denmark, Finland and Sweden, and a major exposure to this risk for Nigeria, Venezuela and Angola, while Romania occupies an average position - 55, down four places from 2015.

The potential impact of the spread of coronavirus was measured in Romania through a survey conducted by the National Institute of Statistics, its results highlighting, since March 2020, the increased uncertainty on the evolution of economic activity. The results show that a third of managers said that activity in the industry will shrink between 25-50% during April, and the most affected will be small and medium enterprises, whose managers have estimated the reduction of activity by 50% or even business closure. In the same context, about half of the survey participants could not estimate the evolution of the number of employees until the end of April.

At the national level, the unemployment rate in August 2020 stood at 5.3%, compared to 3.7% in January 2020.

Measures set by countries around the world to limit the spread of coronavirus (work from home, stopping face-to-face meetings, bans free movement, closure of areas of activity), have amplified fear among the population, manifested in psychological, social and economic aspects (Ayittey et al., 2020; Webham et al., 2020).

## **2.2 Social risk in the banking sector**

Immediately after the first effects of the crisis, the financial sector, especially the banking sector, had to play an important role in absorbing the shock, by granting loans to both the corporate sector and the population (Demirguc-Kunt et al., 2020). Banks have had to align their lending policies with new regulations and legislation (for example, the law on postponing bank rates), develop business continuity plans, while maintaining all health protection measures for their employees, in order to ensure a sustainable profit.

In its study, Adesina (2020) demonstrates that human capital efficiency has a positive impact on banks' performance, and the diversification of banking activities and the creation of efficient and sustainable banking systems are linked to human capital development. Social factors are correlated with both strategic risk and financial risk (COSO, 2018). In this context, economic operators must also demonstrate proper labor force management, so as to minimize staff turnover, limit disruption caused by work-related disturbances or reduced productivity due to poor job satisfaction or due to work at home. Although it can allow a better focus on professional activities, along with higher productivity, work from home intersects, in most cases, with the need to undertake other household activities, which can lead to errors or delays in performing job tasks, events which can generate operational risk. Therefore, the sustainability of the business model involves, in the current context, rethinking strategic objectives in line with the long-term interests of all stakeholders - shareholders, employees, customers, suppliers, society as a whole, while integrating risk management and improving the risk management process, by interconnecting classical financial risks with non-financial risks - social, political, environmental and governance, so that the shocks produced by potential crises of a social, political, climatic, environmental nature are absorbed as easily as possible.

### 3. Conclusions

Profit maximization has long been the main objective of economic operators, especially credit institutions. The global financial crisis of 2008 introduced a new approach to business: the risk-based approach.

Today, the coronavirus pandemic is a new lesson for all the world's economies: health risks can cause economic damage on an unprecedented scale. The measures taken by the states of the world to limit the spread of the virus had human factor as the main actor, and the social risk materialized quickly - protests, street fights (at macroeconomic level), work from home, closing some sectors of activity and banning face-to-face meetings (at the microeconomic level).

However, in order to absorb the shock generated by this crisis, the banking system had to maintain its operational flows at an optimal and adequate level in order to be able to support the economic agents and the population, corroborated with the development of a sustainable activity. Banks need to rethink their business strategies, work procedures, crisis scenarios, stress tests and business continuity plans, by considering actions and including events related to social risk. Credit institutions must also be aware that financial performance is closely and positively correlated with human capital.

This paper proposes future research topics, especially from the perspective of quantifying the financial impact that the coronavirus pandemic will produce on the Romanian banking system, as well as the concrete possibilities of escalating the negative situations that this health crisis will induce.

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## THE INFLUENCE OF PROFESSIONAL ETHICS ON THE QUALITY OF THE FINANCIAL AUDIT SERVICES

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**Abstract:** *The article aims to presents the relevant aspects regarding the evolution of ethical and professional code in the field of financial audit, respectively if the observance or deviations of these principles have an effect on the quality of audit services. Was made a review of the national and international literature and a study case in which were analyzed the effects of ethical principles on the quality of financial audit. In this regard, were studied the most relevant scientific articles that addressed this issue, in correlation with the ethics code issued by IFAC. The main conclusion of the study case is that in the most cases compliance with ethical principles imposed by the profession contributes to increasing the quality of audit services, and their non-compliance leads to a decrease in quality, professionalism and even the reputation of the auditor.*

**Keywords:** ethics, audit, ethical code, quality, IFAC

**JEL classification:** M40, M42

### 1. Introduction

The elaboration and application of a ethical and professional code in the financial audit area is necessary because the profession of the financial auditor is recognized worldwide, thus it is necessary to achieve common objectives and respect some fundamental principles at international level. To provide a conceptual framework for professional accountants, IFAC has issued the International Code of Ethics for Professional Accountants, which governs the fundamental principles of ethics, reflecting the profession's responsibility to act in the public interest.

According to the Code of Ethics, all the financial auditors must adhere to the fundamental principles of professional ethics, which are based on the integrity and objectivity of the auditor, professional competence, confidentiality and professional conduct and maintain professional skepticism throughout the audit engagement.

The article aims to highlight the most important scientific studies that have addressed the research of the effects of professional ethics on the quality of audit services. In this approach, were selected 15 papers, from the period 2015-2020, indexed in BDI, which studied if the ethical principles can increase or decrease the quality ofn the audit services. In most cases, can be observed a positive and significant relationship between professional ethics and audit quality.

## **2. Theoretical considerations**

Both at the national level, especially worldwide, numerous scientific articles have debated the importance of developing and applying a code of ethics in the field of financial audit. In this sense, Mihăilescu (2015) argues that although the financial interests of auditors do not always coincide with the public interest, ethics is the solution to eliminate roughness, the link between the two types of interests, which channels the auditor's work to meet the needs society.

In the conception of the authors Țurlea et al. (2011) the standardization approaches in the field of professional accounting ethics are justified by the need to legitimize the profession and the auditor's concerns regarding reputation, being a similar need found in public sector entities. Bunget and David (2009) believe that ethical behavior is primarily related to the idea of morality and the development of a system of ethical values within a company depends on both the legal framework and the creation of a participatory framework to eliminate forms of fraud.

Satava et al. (2006) describe how rules-based audit traditions have become convenient and perpetuated the unethical conduct of firms such as Enron or Arthur Andersen. The authors present a model of ten ethical perspectives and briefly describe how these ethical perspectives influence the ethical conduct of auditors.

Samsonova and Siddiqui (2016) assessed the capacity of the content of regulations to promote audit ethics in relation to the audit policy imposed by the EU. It is found that EU regulators have a limited view of the concepts of audit ethics and limit the ability of audit policies to stimulate ethical audit engagement.

According to Hofmann (2006), an ethical audit is also a valuable tool to evaluate where the entity can fall below its own standards and expectations. Such an audit involves reviewing the entity's policies, procedures and consistency in vision, mission and values.

All these opinions refer to the importance of the concept of ethical audit, more precisely, the development of an audit commitment in accordance with the ethical principles standardized by each country. Even if ethical principles differ more or less from one country to another, the tendency of regulators is to harmonize and reach a common goal, namely the development of a valid code of ethics worldwide. In this approach, empirical studies have been developed that have tested the relationships between various ethical principles and how they influence the quality of the audit process.

## **3. Methodology**

Was chosen a method of qualitative research, taking into account the fact that the article aims more at theoretical documentation, respectively, a descriptive-explanatory study of the most relevant scientific articles and their grouping according to the studied ethical principles, respectively if they show changes in the quality of the audit services.

The articles were selected in most of the international databases, but also publications in Romania. The selection criterion was the existence of the words "audit", "ethics" or the phrase "code of ethics financial audit", obtaining an initial number of 37 articles, of which we selected 15, which scientifically investigated the correlations between ethical principles and the quality of the audit in the last 5 years (period 2015-2020).

#### 4. Results

Were analyzed for each ethical principle concerned which are the most important scientific studies, respectively what effect concluded the authors, the research methodology used and the chosen sample.

The main ethical principles studied were: confidentiality, impartiality, professional competence, responsibility, integrity, objectivity, professional behavior, professionalism, professional reasoning, independence, audit fees and ethical culture. I presented in table no. 1 which are the most relevant results.

**Table 1:** Studies about the influence of professional ethics code

<b>Ethical principles</b>	<b>Authors and year</b>	<b>Effect on the audit quality</b>	<b>Research methodology</b>	<b>Sample</b>
Confidentiality	Nasrabadi and Arbabian (2015)	Positive and significant	Questionnaire	152 audit managers
	Masoud (2016)	Significant difference in perceptions.	Survey	70 professional accountants
	Arowoshegbe et al. (2017)	Positive and significant	Qualitative study	Literature review
Impartiality	Nasrabadi and Arbabian (2015)	Positive and significant	Questionnaire	152 audit managers
Professional competence	Nasrabadi and Arbabian (2015)	Positive and significant	Questionnaire	152 audit managers
	Masoud (2016)	Significant difference in perceptions.	Survey	70 professional accountants
	Arowoshegbe et al. (2017)	Positive and significant	Qualitative study	Literature review
	Indah și Erina (2019)	Positive	Econometric model	163 auditors from Java
Responsibility	Nasrabadi and Arbabian (2015)	Positive and significant	Questionnaire	152 audit managers
Integrity	Masoud (2016)	Significant difference in perceptions.	Survey	70 professional accountants
	Arowoshegbe et al. (2017)	Positive and significant	Qualitative study	Literature review
	Tahir and Waziri (2019)	Positive and significant	Survey	156 private auditors
Objectivity	Masoud (2016)	Significant difference in perceptions.	Survey	70 professional accountants

	Arowoshegbe et al. (2017)	Positive and significant	Qualitative study	Literature review
	Jachi and Yona (2019)	Positive	Survey	182 auditors from Zimbabwe
	Tahir and Waziri (2019)	Positive and significant	Survey	156 private auditors
Professional behavior	Masoud (2016)	Significant difference in perceptions	Survey	70 professional accountants
	Suryanto (2016)	Positive	Questionnaire	Islamic financial auditors
	Siregar et al. (2018)	Negative	Questionnaire	Auditors from Medan
	Anwar (2019)	Positive	Econometric model	301 public accountants
Professionalism	Suryanto (2016)	Positive	Questionnaire	Islamic financial auditors
Professional reasoning	Arowoshegbe et al. (2017)	Positive and significant	Qualitative study	Literature review
	Nugrahanti and Jahja (2018)	Positive	Questionnaire	Auditors from Indonesia
	Abdelhak et al. (2019)	Negative	Questionnaire	Auditors from Egypt
	Anwar (2019)	Positive	Econometric model	301 public accountants
Independence	Boiral et al. (2018)	Positive relationship, but interconnected with other factors.	Interviews	38 agents who prepare sustainability reports
	Hajiha and Balanga (2019)	Positive and significant	Linear regression	201 financial auditors
	Indah and Erina (2019)	Positive	Econometric model	163 auditors from Java
	Crucean (2020)	Positive	Qualitative study	15 paper indexed BDI

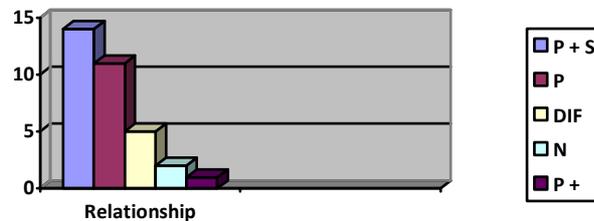
Audit fees	Cahyani and Zulvia (2019)	Positive and significant	Linier regression	Public accountants
Ethical culture	Hajiha and Balanga (2019)	Positive and significant	Linier regression	201 financial auditors
	Indah and Erina (2019)	Positive	Econometric model	163 auditors from Java
	Tahir and Waziri (2019)	Positive and significant	Survey	156 private auditors

Source: own projection

I chose to study chronologically the studies, in order to highlight how much this concept has been developed and its importance for the quality of the financial audit. If in the first years of analysis the most important ethical principles referred to the individual characteristics of auditors such as: professional competence, skills and experience or responsibilities in an audit engagement, over time users' perceptions focused more on the fundamental principles of financial audit such as: integrity and objectivity, confidentiality, auditor behavior and professionalism and professional reasoning used in audit engagements. Subsequently, the authors turned their attention to ethical principles like as independence of the auditor, which is very seriously compromised in the current economic environment.

Currently, the main aspects studied by the authors were related to the ethical reasoning of auditors in various countries, both private and public, to establish as real and correct the fees that auditors receive for services provided and transparency of data on who get them from customers.

The authors of the sampled studies established 5 types of correlations to highlight the effect of professional ethics on the quality of audit services. Were briefly noted these correlations, respectively P + S means a positive and significant relationship, P represents a positive relationship between the two variables, DIF groups the differences in perceptions, N means a negative relationship, and P + means a positive relationship that is influenced by other factors besides those studied. The results were represented graphically in figure 1.



**Figure 1:** The relationships between the studied factors

Source: own projection

The most studies concluded a positive and significant relationship between ethical principles and the quality of audit services, respectively a percentage of 43%. A

positive relationship between the studied ethical principles and the effects on the qualitative level is obtained in a percentage of 33%, respectively differences of perceptions in a percentage of 15% and the negative relations between the studied factors are in a percentage of 6%, while a positive relationship, but influenced by other external factors holds a percentage of 3%.

## 5. Conclusions

Studies have concluded that all these ethical principles have a significant effect on the quality of financial audit services, and non-compliance with the code of ethics has a negative influence on the quality level of audit engagement.

It can be seen that professional reasoning was the most intensely debated ethical principle, followed by principles such as: professional behavior and competence, independence and objectivity of the auditor. The ranking is followed by studies that have investigated the relationship between ethical principles such as: confidentiality, integrity, ethical culture and the effect on the quality of audit services. Less studied were the ethical principles regarding auditor impartiality, audit fees, professionalism and auditor's responsibility.

The limitation of the research consists in the fact that the data were collected manually from the international databases, and the future research directions aim at expanding the number of scientific studies and the elaboration of a quantitative econometric model.

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## ROMANIAN-HUNGARIAN CROSS-BORDER TOURISM

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**Abstract:** *Tourism is considered a key "target" for cross-border cooperation programs, which aim to enhance its role in local and regional communities by addressing local sustainable development. The specificity and attractiveness of a region do not stop at the border of a country, and this is exemplified by tourism. As tourists are interested in visiting regions with specific attractions, cross-border cooperation could be a unique opportunity for tourism development by both countries in a border area. The benefits for the stakeholders involved (eg individuals, companies, local authorities) will only become effective if cross-border cooperation is operational and tourism resources and facilities are displayed uniformly everywhere. Cross-border cooperation in tourism can also provide the means for a more efficient use of certain local benefits for the growth and consolidation of a regional tourism industry, which is based on the sustainable consumption of resources.*

**Keywords:** *cross-border, cooperation, tourism, Romania, funds.*

**JEL Classification:** *F26*

### **1. Introduction**

Many times, joint initiatives in the development of cross-border tourism based on cooperation tourism planning collaboration have been a tangible success, generating organizational links and stimulating economies, facilitating the role of cross-border cooperation in other areas of interest both locally and at regional level (eg infrastructure, environmental protection, health, transport, culture, etc.) (Reed, 1999).

In recent decades, local authorities have been challenged to facilitate and harmonize the interaction between various interests (ie local, regional or global) that tend to influence the direction of local development, "so that development achieves the common vision of the local population" (United nations, 1999).

Tourism is one of those external forces that can affect the impact on the direction and intensity of local development interests, especially when local communities serve as tourist destinations. For local communities, tourism could generate not only direct economic results (eg new business, income, employment), but also intangible results, such as the image of the place and the identity of the community (Kostopoulou et. all, 2015).

Tourism could emphasize all resources, both individually and locally (eg personal contacts, authenticity, traditions, cultural heritage and proximity to nature),

cooperation between communities, neighboring areas and regions, leading to economic development (Briedenhann et al., 2004).

Churugsa et al. (2007) considers that local government has three key areas of involvement in tourism: (1) to plan and integrate it in all relevant public sector policies at local, regional and national level, to ensure and develop all supply components. (infrastructure, facilities and attractions) in the field of tourism; (2) to establish and enforce legislation and regulations to ensure sustainable and efficient tourism development, to protect the cultural and natural environment; and (3) to work with the private, non-governmental sectors and communities to maximize tourism benefits and reduce at least duplicate efforts and conflicts.

The HU-RO border area is a remarkable tourist destination, suitable for both nature-based tourism and cultural tourism, while the most important types of tourism that could be practiced are spa and wellness tourism, as well as mountain tourism (including sports and caving), cultural tourism and rural tourism, etc.

Accommodation capacity is unevenly distributed in the area: about two thirds of the numbers of accommodation places are located in Hungarian counties, ie 50,000 out of a total of 79,000. However, the number of tourist arrivals and the number of nights spent are relatively evenly distributed in the two counties, resulting in a level of occupancy in Hungarian counties, which is about half of the reported level compared to the Romanian ones (Meşter et al., 2008).

The tourism sector in cross-border cooperation HU-RO has received significant attention in cross-border funding programs and has therefore benefited from significant financial allocations, ie 8% of the total number of projects funded and around 9% of the funds allocated. Specifically, within the PHARE project of cross-border cooperation 2004-2006, six tourism projects were financed, with a total value of EUR 834,000. Also, in the HU-RO program of cross-border cooperation 2007-2013, a number of 34 projects supporting tourism were funded, with a total value of EUR 18,112,000.

## **2. Examples and cases of Romanian-Hungarian cross-border cooperation**

Hungary and Romania, as well as the local areas of the border counties have formed several types of cross-border cooperation. The main element of a recent Hungarian-Romanian partnership was the Hungarian-Romanian cross-border cooperation during 2014-2020. In another partnership being the antecedent of this cooperation, ie the cross-border cooperation HU-RO during the years 2007-2013, which was established in the last programming period, in 2007.

HU-RO cross-border cooperation had two priorities: Priority 1 - Improving the key conditions for the common and sustainable development of the cooperation area and Priority 2 - Strengthening social and economic cohesion in the border region (Bădulescu et al., 2014).

The new cross-border cooperation is extended; the program, which was approved by national governments in May 2015, now has 6 priority axes. Priority 1 was "Common protection and efficient use of shared values and resources (Cooperation for shared values and resources)", Priority 2 was "Improving sustainable cross-border mobility and removing bottlenecks (Accessibility cooperation)", Priority 3 was "Improving employment and promoting cross-border labor mobility (cooperation for employment) ", Priority 4 was " Improving health care services (cooperation for health care and prevention) ", and Priority 5 was"

Improving risk prevention and management disasters (risk cooperation and disaster management) "and, finally, Priority 6 was" Promoting cross-border cooperation between institutions and communities (cooperation of institutions and communities)".

The program is complex, with the intention of promoting cooperation on the main common tasks in the border area, ie in the economic sector, in public services and in risk prevention and disaster management. Promoting cooperation between institutions is a very significant element, and cross-border cooperation between Hungarian and Romanian organizations is considered to be one of the biggest problems of the Hungarian-Romanian cross-border partnership.

The participants in this cross-border cooperation are the national governments and the HU-RO border counties, which belong to different regions (NUTS 2) for each country. The program is funded by the European Regional Development Fund (ERDF) - through the Interreg V / A sub-program. The total value of the ERDF financial credit is EUR 189,138,672 from 2014 to 2020 (Bădulescu et al., 2016).

There are also other forms of cooperation involving the border areas of Hungary and Romania. Therefore, we would like to introduce the Hajdú-Bihar - Bihar Euroregion, which was established by the Hungarian county of Hajdú-Bihar and the Romanian county of Bihor.

The other Hungarian-Romanian cross-border partnerships have not only Hungarian and Romanian participants. First of all, the Hungarian-Romanian border areas participate in the Carpathian Euroregion, which is one of the largest Euroregions in East-Central Europe, which groups border entities (counties, regions) from Ukraine, Poland, Slovakia, Hungary and Romania. This Euroregion is very large and, as a result, a lot of problems have arisen regarding the efficiency of its large area (approximately 161 000 km<sup>2</sup>) and the large population (approximately 16 million inhabitants).

Secondly, Romania and Hungary also participate in the Euregions and the European Grouping of Territorial Cooperation (EGTC) involving Serbian participants. Duna - Körös - Maros - Tisza Euroregion / Duna - Criş - Mureş - Tisza Euroregion (DKMT Euroregion) was formed in 1997 and has an area of 71,879 square kilometers and a population of about 6 million people; its main ethnic groups being made up of: Hungarians - about 41%, Romanians - 30%, Serbs - 19%. Although the territory and population are relatively large, this Euroregion has several advantages, such as direct access to three rivers, which is important for transport and irrigation, as well as the European transport corridor E4.

The European Grouping of Territorial Cooperation (EGTC) has become an important form of cross-border cooperation and partnership in the European Union, which is, as mentioned above, supported by the European Union. Fifty municipalities in the area of the three borders, Hungarian - Romanian - Serbian, which were established in 2009, the EGTC "Banat-Triplex Confinium", which has an independent development program (Bădulescu et al., 2015).

### **3. Examples and cases of cross-border cooperation at international level**

An example of cross-border cooperation is the cross-border cooperation project, in which Bosnia-Herzegovina, Croatia and Montenegro participated. The challenges associated with border trade in tourism and the barriers associated with collaboration between the 3 destinations were explored, through a quantitative tool

administered by public and private organizations involved in tourism, identifying specific challenges for a border region in the southern Adriatic. As these internal mechanisms are still under development in Bosnia and Herzegovina, Croatia and Montenegro, they often make interactions between all parties a little more difficult (Lagiewski et al., 2004).

Although the formalities commonly associated with international borders are sometimes considered annoying and often add a perceived distance to certain tourist destinations, borders often function as tourist attractions. Because tourism is also important in areas adjacent to borders (border areas), there are many examples where tourist flows between neighboring countries are severely restricted (e.g. many African and Middle Eastern borders) and even banned (e.g. North and South Korea). In many respects, the existence and functions of political borders influence the nature of the tourism industry itself and the spatial development of many tourist destinations, especially in tourist regions adjacent to or divided by international borders (Dallen, 1995).

The role of international borders in tourism is usually one of transit. Many people reach the border, go through customs and immigration and continue on their way in a hurry. However, it is not uncommon to see tourists (where permitted) photographing welcome signs, border markings, flagpoles displaying the foreign country's flag and customs buildings (Matznetter, 1979).

Indeed, some crossing points are even provided with areas where drivers can get off the road to see the border boundary up close. This is the case at the Dutch-French border on the island of St Martin and at the Peace Arch in Blaine, Washington, USA and White Rock, British Columbia, Canada (Timothy and Butler, 1995).

For years, people have crossed political boundaries to shop. Shopping malls, grocery stores and gas stations often attract people from across administrative borders for a number of perceived benefits, including lower prices and taxes and a wider or different selection of goods. In addition to shopping (both for pleasure and economy), many cross-border shoppers often include travel activities such as watching movies at a cinema, visiting museums and historical or natural attractions, eating in restaurants, using public transport, and for those who stay more than a day, spending the night in local accommodation. Therefore, international cross-border shopping is not only an economic activity, but can also be seen, in many cases, as a form of pleasure-based recreational travel for many people and a major generator of tourism in border areas (Lovelock and Boyd, 2006).

Cross-border shopping is a common activity in many parts of the world. A number of publications identify the importance of this activity in Europe, between the Republic of Ireland and Northern Ireland, between Denmark and Germany and between Switzerland and its neighbors. In the North American context, it is probably most notable along the US-Canada border. Canadians shopping in the United States have long been an element of both trade and tourism between the two countries, and the phenomenon has been favored by the relative ease of crossing the border, the large number of crossing points and the familiarity and similarity between two countries (García-Álvarez and Trillo-Santamaría, 2013).

There are a number of opportunities for further research on the relationship between borders and tourism, especially in light of the major political changes taking place in much of the world to date.

Local tourism projects have generally been successful, both at the German-Czech transnational level and between the German states of Bavaria, Saxony and Thuringia. However, there has been no structural management of cross-border destination due to (transnational) multi-scale institutional alignment issues, ie due to (domestic) power challenges that are specific to destination-level tourism.

There are some shortcomings in research when it comes to explaining the remarkable lack of success in attempts to establish governance of tourism in border areas. *Firstly*, the tourism planning literature covers borders only implicitly, reflecting the territorial limitations of decision-making power. *Secondly*, there are some studies on cross-border tourism are generally focused at transnational level, ignoring the fact that territorial boundaries ranging from municipal and regional borders to national borders have all the management complexities. *Third*, both cross-border governance research and cross-border tourism studies have paid limited attention to power relations. However, tourism planners have widely acknowledged that destination-level governance is highly politicized and involves power relations between different actors, which aim to shape the tourism system in their favor. At the same time, previous research shows that Euroregions remain embedded in national territorial and administrative structures, as well as in socio-cultural characteristics. This incorporation serves to limit their autonomy, while asymmetry in the institutional organization on both sides of the border impedes their decision-making power.

While the dependence of cross-border agreements, such as Euroregions, on national structures is regularly noted, Princen et al. (2016) calls for a broader focus to understand the results of cross-border governance. Princen et al., also point out that the lack of integrated cross-border practices leads to "the collection of activities, largely ad hoc and unrelated, by professionals and local government organizations, which together produce a specific model of cross-border cooperation"). Cross-border development plans in EU regional policy can become internalized at the local level, but with a contextual dependence on the adoption of these perspectives.

#### **4. Conclusions**

Therefore, European cross-border regionalization processes are characterized by power struggles and sometimes contrasting stakeholder policies operating at different scales. The emerging model of cross-border cooperation does not always appear due to formalized strategies. Rather, it can result from decentralized and contextual processes that take place within the formal framework of cooperation.

In addition, the ever-changing role of borders, as highlighted, for example, by the recent migration crisis in Europe, reflects the temporal sensitivity of the results of short-term case studies, even when they, as we see in this paper, considers the historical contingency and path dependence of cross-border actions.

Tourism is a pioneering industry in the process of cross-border regionalization, understood as the transformation of the into tourism landscapes of the national border countries, which attract tourists for their unique cultural attributes and as a place of transit.

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## SAVING POST-PANDEMIC TOURISM THROUGH DIGITALIZATION

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**Abstract:** *A year ago, most of us were probably on vacation or thinking about a future 2020, a year that supposed to be full of expectations. However, the holidays were no longer realized, human freedoms were restricted, fear, anxiety and uncertainty became commonplace in everyday life. The beginning of 2020 would be one worthy of some of the darkest dreams everyone could have, a kind of teaser of a long horror movie. Thus, with the overwhelming spread of the COVID-19 virus, as expected, many of the world's industries have been put to the test, small business industries being a good example in this regard, being on the verge of impossible to pay employees, some even being one step away from insolvency. Stopping economic activities or imposing all sorts of restrictions aimed at slowing the spread of the new virus have been and continue to be sensitive and at the same time widely debated topics around the world.*

**Keywords:** digitization, tourism, pandemic, E-turism, Internet

**JEL classification:** L3; Q01; Z3; Z32

### 1. Introduction

Tourism is an important branch of the global economy, as 7% of international trade is related to this sector, and tourism directly or indirectly generates one in ten jobs worldwide. However, the closure of borders and the imposition of all kinds of travel restrictions could be seen in international tourist arrivals, which were 93% less in June 2020, compared to the same month in 2019.

Other statistics on pandemic tourism are as follows: in the first half of 2020 (January to June) there was a decrease of 440 million international arrivals, and the predictions are even more bleak, as UNWTO reports expects the decrease of international arrivals by up to 60-80%, compared to 2019, when through the 1.5 billion international arrivals, there was an increase of 4% compared to 2018. In fact, according to UNWTO reports, 100% of global destinations had travel restrictions, and of this percentage, until April 2020, 83% of destinations adopted restrictions for four or more weeks. Therefore, we are witnessing times full of uncertainties, nothing being certain.

Even researchers face difficulties in creating scenarios that expose a tourism situation as close as possible to reality. Statistical data on the pandemic are unpredictable, with daily news that can create confusion among the population. The borders of the countries are closing and opening, the security measures among the population also know certain "relaxation periods" followed by the

adoption of even more restrictive measures as a result of new waves of infections among the population, while, perhaps the more demoralizing aspect would be that of the passage of time, irreversible time in fact, which "flows slowly but surely" we could say, in this period of the pandemic, in which daily activities were replaced by isolation at home or social distance it comes with some reluctance when we refer to human interaction, so, implicitly, the start of many activities is difficult.

## **2. Digitization, a new perspective for tourism development**

Being in times of hardship, it is necessary to turn all our attention to maintaining good health, by complying with the health safety rules imposed. In fact, from the beginning of the outbreak of the first cases of COVID-19 in China, the Chinese authorities quickly proceeded to quickly identify and test cases, track the contacts of sick people, and quarantine cases and their contacts, applying provisions which encouraged symptomatic individuals to isolate themselves at home in the event of symptoms associated with the new virus. The actions taken by the Chinese state were implemented in all those parts of the world where the current virus took strong roots, especially after March 11, when the World Health Organization (WHO) officially declared a pandemic of COVID-19.

Social problems that have affected people's well-being, including those related to crisis management, have not been long in coming.

So, what did the man have to do, other than to find out about the risks he could be subjected to as a result of not respecting the sanitary norms imposed during the pandemic period?!

Currently there are multiple possibilities through which information can be disseminated among the masses. The media and the online environment are the main sources of information, which can be available to each of us. Moreover, the technological progress registered after the 2000s, especially the appearance of the iPhone in 2007 and the launch of the Android operating system in 2008, culminated with the popularity of smartphones among all the social classes.

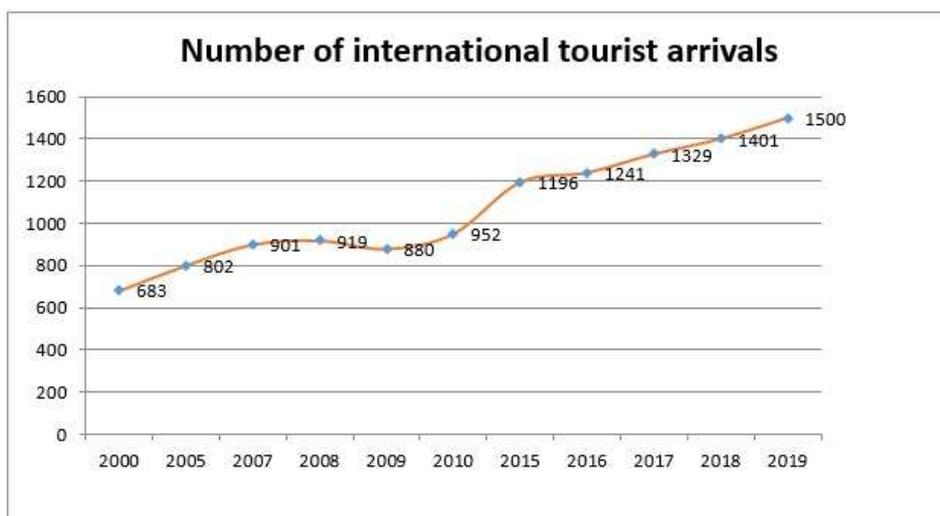
So, the beginning of the 21st century can be considered to be an overwhelming technological and scientific start amplified by the socio-human development tendencies. In addition, smartphones have come bundled with new facilities for buyers, including high-speed internet, 4G speed has been available since 2010, but also the emergence of mobile applications that have been a technological boom, beneficial for most industries, tourism being among the most won sectors from this point of view. Higher internet speed can be interpreted as an opportunity to gain valuable information.

In fact, through the use of smart technologies, tourism has certainly become more popular among travel lovers. Thus, using the Internet, for example, the tourist destination "X" can be promoted worldwide, unlike the classic ways of promotion, through which a well-established target group, otherwise local, regional, and at most national would have managed to access tourist information.

Having the three factors, the tourist potential, the anthropic factor and the digitalization present nowadays everywhere, there is the problem of effective management of the relationship between them. The last 20 years have proved to be some of the great changes, man managing to explore seas, oceans, spectacular mountain peaks and landscapes as if detached from this reality, and fortunately, without being in great impasse. Until the moment of the COVID-19

pandemic, the travel represented a habit of the contemporary society, an ennobled habit of the fierce spread and use of various technologies.

Statistical data (Figure 1.) on the number of international arrivals are clear evidence of a rising rate. Thus, starting with the year 2000 until the year 2008 inclusive, the increases in the tourism field in terms of international arrivals are obvious, with representative values in this respect, as follows: 683 million in 2000, 802 million in 2005, 901 million in 2007 and 919 million in 2008. As a result of the economic crisis that occurred in 2007-2008, 2009 registered a slight negative trend, with 39 million fewer international arrivals than in 2008. However, tourism has quickly regained its luster, as in 2010 there were 952 million international arrivals, 1.196 billion in 2015, 1.241 in 2016, 1.329 in 2017 and 1.401 in 2018, while in 2019 there were over 1.5 mildew. of international tourist arrivals.



**Figure 1:** Number of international tourist arrivals from 2000 to 2019

Source:<https://www.e-unwto.org/doi/pdf/10.18111/9789284413720>,<https://www.e-unwto.org/doi/pdf/10.18111/9789284421152>,<https://www.unwto.org/international-tourism-growth-continues-to-outpace-the-economy>

In any case, the year 2019 was a prolific one in terms of statistical data, but the year 2020, a pandemic year, is one that shattered the joyful predictions of tourism specialists, because the reality was different from expectations. Therefore, according to UNWTO reports, only in the first months of the year there were decreases of up to 65% in terms of the indicator we submitted to the analysis in the above lines. Until the current moment of the research (October 30, 2020) no significant reports have been issued in this regard, the data being in the process of gradual collection and interpretation, until the end of the year.

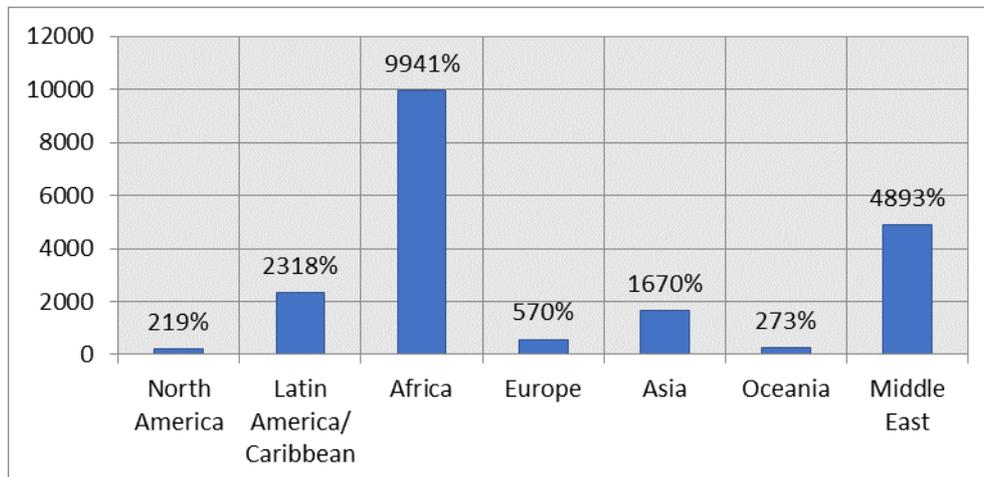
However, the analyzed sources have made a series of scenarios that outline an eminently difficult tourist reality, with decreases of 2020, between 58% and 78% in terms of international tourist arrivals. Thus, following the above, it can be stated that the tourism sector has been subjected to severe trials and will probably continue to present an unfavorable balance in 2020 and those to follow, and reporting on the period of global economic crisis occurred in the years between

2007 and 2008 represent a good occasion for not only the actors in the tourism sector, but the whole humanity to be aware that the tourism sector at the moment, of the pandemic, is in an unfavorable situation, in which it has never been before. Being in a new situation, difficult to understand and accept, and also taking note of such data with a huge impact on our perception of what tourism has represented and what it will try to be, see you to be in a circumstance in which it is necessary to find solutions aimed at saving tourism in the coming years, at the same time with the possibility of not endangering our health due to the SARS-CoV2 virus. So, we will ask ourselves: Can the internet be a good way for tourism to overcome the pandemic? We will analyze the answer leisurely by exposing the SWOT analysis regarding digitalization in tourism.

### 3. The Internet and its true potential

The Internet and everything that involves the use of the Internet is increasingly in people's lives, and statistical data conducted by various companies or organizations reveal at least interesting aspects of the consumption of data on the globe. One cannot discuss a digitization without being up to date with the statistics in the field, being necessary to study if an advanced technology can be implemented that is easy to assimilate by the population.

In about 20 years, the Internet has seen remarkable growth, especially in Africa (9,941%) or the Middle East (4,893%). This trend demonstrates that more and more people are attracted to the benefits of WEB services.



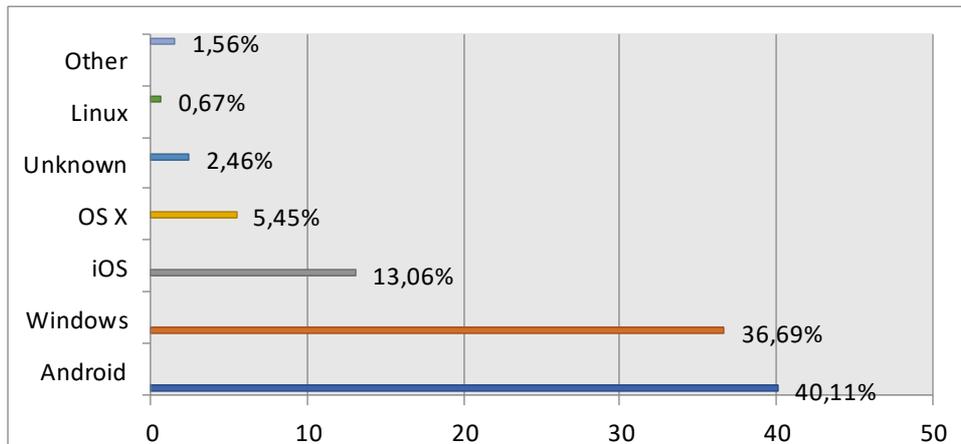
**Figure 2:** Internet use between 2000 and 2019

Source: <https://www.internetworldstats.com/stats.html>

Internet access is done using various smart devices, but without operating systems WEB services are not available.

There are various operating systems all over the planet, each with its own advantages and disadvantages, but users are free to use any system. According to statistics made by Internetworldstats.com, depending on the quality / price ratio, most prefer Android, then Microsoft Windows, IOS and other operating systems.

As an operating system Android is preferred by most of those with different smart devices, primarily due to accessibility, being present on many smartphones or tablets, the price is generally lower, the quality of this operating system is good and is a relatively easy to use it.

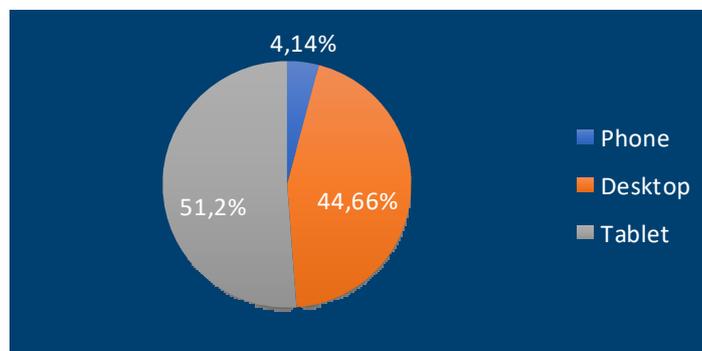


**Figure 3:** The most popular operating systems

Source: <https://gs.statcounter.com/os-market-share#monthly-201802-201802-bar>

The Internet was a concept that was originally supposed to work on a computer connected to a server, but with its popularity, laptops were created, which used the same operating system. The beginning of the 2000s led to a strong technological advance, every year IT companies surpassed their own records, and at more than 15 years anyone can access Internet services from a computer or laptop, phone, tablet, watch, etc.

Currently, the most used devices for Internet access are smartphones, with over 50% of all users, then computers or laptops, with about 43%. One of the reasons why smartphones are so sought after is because they are very practical, the size being much smaller compared to a laptop or PC. Also, the vast majority of Internet users prefer to use smartphones when they want to do a shopping session.



**Figure 4:** Popularity of different devices worldwide

Source: <https://gs.statcounter.com/platform-market-share/desktop-mobile-tablet#monthly-201802-bar>

In total, at the end of 2019, a large study was conducted by Hootsuite and WeAreSocial and was then presented in the form of a report, indicating that approximately 4.5 billion people use the Internet worldwide, ie more half of the Earth's population is online. Of these, around 3.8 billion use different social networks to communicate with other people or to share content. It should be noted that this report refers to a population of 7.75 billion.

Looking at this data, one can see the need for technology on the planet, and all this need can culminate in a comprehensive digitization, which is certainly expected.

#### **4. SWOT analysis regarding digitalization in tourism**

The coronavirus pandemic has pushed humanity to take faster steps toward digitization and automation. Currently, every state that wants to have a capable tourism is forced to invest in the creation of a tourist brand, but also to have a strong digital identity. In order to prevent some of the possible effects of the economic crisis that will follow, tourism actors have to resort to many ways to be competitive. But for the digitalization of tourism to be achieved in the best conditions, a deep analysis of everything that is currently known is needed.

There is an increasingly popular opinion that considers that this period led to the outbreak of the "fourth Industrial Revolution", which has in its midst concerns about the bio-tech industry, nano-tech, communications and telecommunications, 3D technology, Reality Augmented, Virtual Reality and last but not least Robotics. The latter, according to IFR, registered an absolute investment record in 2018, expecting that in the period 2020-2022 the investments will be even higher.

It should be noted that among the first measures towards this forced digitization of the tourism industry was made since the beginning of the pandemic period, when many museums opened their virtual gates to tourists, offering free tours.

Expectations for the IT industry are high because with this advancement in technology, tourism can receive real help to better cope with this unprecedented economic crisis.

Technology can help tourists in terms of safety and comfort by developing methods to protect travelers from unnecessary human contact. Some examples that support this idea could be:

- Restaurant customers can order food or drink using the smart devices provided and can also pay contactless, avoiding contact with waiters.
- The doors inside and outside the locations can be operated with the help of motion sensors.
- Elevators can work with voice commands.
- All can be automatic, being a more hygienic method.
- Some famous destinations can offer virtual tours.
- Different courses can be taken online.

#### **Strengths**

- Currently, due to technological advances, it is easier to create one or more secure and well-developed digital tourism platforms
- The digitalization of the industry leads to the increase of the quality

level of the tourist services

- Feedback has always been an important aspect for tourism, and with the help of technology it is accessible to anyone who has a smart device connected to the Internet

- Niche tourism is less sought after during this period, tourists tend to look for more customized packages, and technology can facilitate their creation

- The coronavirus pandemic has determined more and more tourists to choose nature or sustainable tourism, which is a great benefit to nature and the planet

#### Weaknesses

- In less developed countries, digitization is very difficult to implement

- During the pandemic, technology advanced rapidly, and many people in the tourism sector did not have a proper education in this regard.

- Hospital employees are relatively difficult to reorient to another field that requires technological strategies

- There is still no complex and detailed strategy for digitizing tourism

- Without the support of the authorities, digitization cannot reach its full potential

- The fact that during this period the tourist behavior changes depending on the evolution of the pandemic makes it difficult to build an effective strategy for all parties involved

#### Opportunities

When stable and secure digital platforms will be created, there will be a much more efficient collaboration between all branches of the tourism sector.

- Digitization inevitably leads to the creation of more jobs

- With the help of technology, various tourism applications can be massively developed that use AI, VR, AR, Blockchain or 3D printing principles.

- The need for new technologies of the younger generations leads to an easier digitalization of the tourism industry

- The pandemic has led more and

## Threats

more people to choose activities in nature, such as hiking, camping, etc., and the creation of various applications to make their experience more enjoyable is also to the advantage of those in the IT industry.

- As during this period the safety of tourists is at the forefront, technology can facilitate the implementation of protection measures for a safe holiday
- Digitization can change all the bureaucracy that involves tourism, especially external one, facilitating certain operations

Through digitalization, interpersonal contact is reduced as much as possible, and this can induce panic in the population

- The transition to full digitalization comes with huge costs and there is no certainty that they can be fully covered in the context of an inevitable economic crisis

- Digitization is a process that is implemented over a long period of time, but this pandemic "forces" this process

- A big problem is related to cyber security, which must be at the highest level

## 5. Conclusions

Digitization is a growing phenomenon that is inevitable. The pandemic period only hastened this process. But in order to be implemented correctly, it involves the hard work of researchers, authorities and all people. Tourism, a sector so affected during this period, must receive special attention to regain control and prevent the decline triggered in early 2020. New technologies can help the tourism sector to reinvent itself and be able to generate large income and jobs.

On the other hand what the marketing campaigns for sustainable tourism or the awareness campaigns failed, this pandemic of COVID 19 succeeded, but from this information a question is born whose answer we will find out in the years to come: The planet has received a mouthful of air, but was the price paid too high?

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## THE ROLE OF INVOLVING LOCAL COMMUNITIES IN THE SUSTAINABILITY OF AN ECODESTINATION. CASE STUDY: ȚARA HAȚEGULUI – RETEZAT

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**Abstract:** *Any tourist destination for optimal development needs the cooperation of the actors who created and support it. In any analysis or research, from my point of view, I find it appropriate to start from where everything started: one destination, that is, the way a local community responds to the other - in our field of study, which means people who love to travel for any reason - by which this meeting is given by the concept of hospitality. The latter consists of three basic layers, one being deep, the cultural foundation, then there is an institutional level (often compared to the "rules of the game" that must be followed by local communities and tourists) and the level of social interaction. I believe that starting the local analysis is the only way to start consolidating a theoretical construction based on hospitality in its original sense. However, starting with modern times and to be more precise following the development of capitalism, a different phenomenon appeared, based on hospitality as a commodity, through which the meeting between locals and the other / tourist was no longer based on the hospitality of locals, but had to follow an internationalized standard.*

**Keywords:** ecotourism, ecodestination, tourism, vision, sustainability, local communities

**JEL classification:** Q01; Q56; Z3; Z32

### 1. Introduction

Tourism is an industry that has grown so much in recent years that it can become a danger of degradation for the resources it promotes. Visiting the villages of Țara Hațegului, hiking in the national Park of Retezat, cycling in the communes of Densus, Sarmizegetusa and Rachitova, visiting the Valley of Dinosaurs, old churches, medieval fortresses are all amazing experiences, but the resources on which these experiences are based must be managed and the host communities taken into account.

Therefore, in order to develop a tourism industry in a sustainable way, a vision must be devised to create economic opportunities for local communities, to facilitate the involvement of the population in actions of nature conservation and biodiversity protection, but also to provide an experience of traditional natural and cultural processes, all in conditions of respect for communities and sustainable use of both natural and anthropogenic resources.

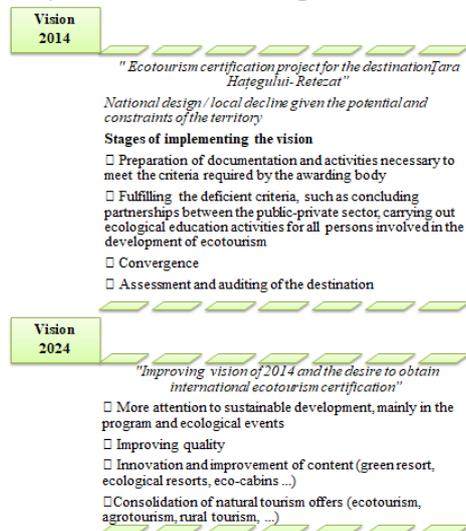
## 2. The framework for the strategic activity of the 2024 vision

Rural and cultural tourism can and must go hand in hand with the improvement of livelihoods and the conservation of nature, but also of the anthropic environment. Țara Hațegului - Retezat is a destination on the territory of which elements with a special cultural, historical and scientific significance meet, all of them located in a sublime natural setting. In addition to the tourist potential and the landscape value of a special feature, the destination has as a strong point an exceptional ethnographic background, with unique local traditions, well-preserved ancient customs and traditions, traditional houses specific to the area, but also an unmistakable harbor, make the destination Țara Hațegului - Retezat a special destination, with a unique character.

The destination Țara Hațegului - Retezat consists of three protected areas of national and international interest, these being: Retezat National Park, Grădiștea Muncelului Natural Park - Cioclovina and Dinosaurs Geopark Țara Hațegului representative for ecotourism, which makes it the perfect candidate for the title of ecotourism destination. All these criteria are the basis of the decision of the Retezat Tourism Association to propose the destination Țara Hațegului - Retezat to run for the title of ecotourism destination, which represents the main vision of 2014. Vision that became a reality two years later, when in 2016 Țara Hațegului - Retezat became a certified ecotourism destination.

There is still much to explore and experience in our destination. Our vision is to promote the diversity of Țara Hațegului - Retezat with a deep attention to social inclusion, sustainable development and environmental conservation, and to demonstrate that this nationally certified destination is worthy of receiving certification from an international ecotourism certification system.

The aim of our vision is to develop a tourism model that combines sustained growth and responsible environmental stewardship with respect for the authentic social and cultural life of local communities. However, all this cannot be immediate, the process can be a long one, which made us think of a vision for 2024.



**Figure 1:** Consolidation of visions

Source: authors

Vision 2024 must be carried out in a spirit of cooperation between the various organizations involved in this process: private and public, national and local. It must be based on an innovative approach to sustainability, based on a new generation of tourism products, long-term ecosystem management and local participation in the development and benefits of tourism.



**Figure 2:** Principles of Vision 2024  
Source: authors

Any lasting positive impact must start with ourselves, and for all this to be possible, this process must involve not only local authorities and stakeholders in the development of ecotourism in the area, but also local communities, they must be included in the diversification process. and enrichment of ecotourism offers. Desirable is an active involvement, not manipulative, but one carried out under the beneficial incidence of cooperation, consultation, interactivity towards a common goal: the sustainable development of the tourist destination it populates (Table 1).

**Table 1:** Typology of forms of involvement of local communities

<b>Tosun typology 1999</b>	<b>Pretty typology 1995</b>	<b>Arnstein typology 1971</b>
1 Manipulative	1 Manipulation	<i>Coercive participation</i> Top-down, passive, formal, mostly indirect, participation in implementation and sometimes in benefits, paternalism, manipulation, non-participation
2 Passive	2 Therapy	
3 Consultation	3 Information	<i>Induced participation</i> Top-down, passive, formal, mostly indirect, manipulation, pseudo-participation, participation in implementation and benefits, choice between proposed alternatives
4 For material incentives	4 Consultation	
5 Functional	5 Reconciliation	<i>Spontaneous participation</i> Top-down, active participation, direct, involvement in decisions, genuine self-planning participation
6 Interactive	6 Partnership	
7 Automotive	7 Delegated power	
	8 Citizen control	

Source: Tosun, C. 2006. Expected nature of community participation in tourism development. *Tourism Management*. 27 (3). pg.493-504.

### 3. Conclusion

We cannot omit the COVID-19 pandemic that "swallowed" the globe and already had a huge impact on life as we once knew it. With planes on the ground, quarantined people and hundreds of travel bans, COVID-19 has brought the global tourism industry to a standstill, even signs of grinding (Jamal & Budke, 2020). As specialists focusing on tourism, the pandemic has revealed how little we really know about how to deal with such extraordinary crises or, worse, after their changes. Anthropologists and geographers have shown how crisis makes sense and initiates criticism of a given condition (Masco, 2017; Roitman, 2013). In this way, the post-pandemic crisis can allow the concealment of damaged production conditions and its corollary social structures by stabilizing the conditions under which it is produced (Barrios, 2017: 151). COVID-19 is an unprecedented crisis, which has the potential to uncover everything we once knew about, among other things, social inequality, environmental sustainability and stopping tourist flows. Indeed, it has shocked the core of global tourism. It is simply a call to action - action in research, as well as praxis (critical change) and especially in the thinking and involvement of communities in the sustainability of ecotourism destinations. It aims to promote the knowledge base on crises and threats that shape the 21st century landscape of local to global travel. While COVID-19 is currently on the global stage, the future will undoubtedly bring more crises and shocks, many of them unmatched in nature, extent and reach (Norum, Mostafanezhad and Azcárate, 2020 ). Are we ready to face them? Do we have life-saving solutions to revive post-pandemic tourism? Will we regain the confidence and security to "do tourism again", to outline new concepts in the evolution of ecotourism destinations, able to offer a "shelter" climate mentally and medically.

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## OVERVIEW OF THE AGILE RATIONAL UNIFIED PROCESS (RUP) IN THE CONTEXT OF SOFTWARE DEVELOPMENT PROJECTS

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**Abstract:** *One of the processes of software engineering is the AGILE methodology, which is famous for its iterative method of development. Its well-known types include Rational Unified Process (RUP), Scrum, Extreme programming (XP), and Adaptive software development. RUP is an incremental software development process which delivers releases over time with improvements per release while following the best practises along the way. The four phases of RUP, Inception, Elaboration, Constructions, Transition, provide a sequential and iterative approach to the development of a product. The workflow is divided into logical activities that are nine disciplines, and are maintained and performed throughout the four phases of RUP. RUP is not only a system development process but is also a mindset, which can be implemented with any process or project, by following certain recommended practices which will be discussed in the present paper.*

**Keywords:** Agile, Rational Unified Process, Software Development

**JEL classification:** Y20.

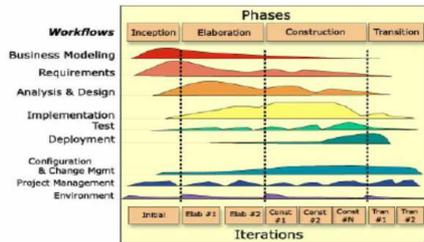
### 1. Background

The Agile methodology is one of the processes of software engineering, which is famous for its iterative method of development. Agile is especially useful in the context of a continuous evolvement of the requirements and solutions, creating a solid foundation and helping the team to respond to the changes in a natural and faster way. Its famous types include Rational Unified Process (RUP), Scrum, Extreme programming (XP), and Adaptive software development. From the mentioned types, the Rational Unified Process (RUP) will be discussed in the present paper. RUP stands for a Rational Unified Process; it focuses on creating and maintaining models, rather than on producing large amounts of documents. It is developed and maintained through Rational Software. The people responsible for RUP work in close quarters with clients, partners and product groups to ensure that the RUP is continuously updated and improved to keep up with the new times. RUP guides in the usage of Unified Modelling Language (UML). UML is a standard language that allows users to display their requirements, designs and architecture. UML was originally developed by the Rational Software (Christensson, 2006) as well, but is now handled by the Object Management Group (OMG). RUP is also supported by tools which help in the automating of large parts of the process. These tools are used to maintain and create various artefacts, like models, for the software engineering process, such as visual modelling and

designing, programming and testing. These all are the reasons that RUP provides the best practices in software development which are suitable for a wide variety of projects and organisations.

## 1. The dimensions of RUP

There are two crucial dimensions of RUP, along with 4 phases and nine disciplines and their correspondence is indicated by Figure 1 (Anwar, 2014).



**Figure 1:** Overview of RUP

Source: (Anwar, 2014)

### 1.1. The disciplines of RUP

There are nine disciplines defined by RUP (Hirsch, 2002):

- Business Modelling:** both the business processes and its internal structures are defined to get a better understanding and to be able to come up with requirements for the desired software. Business Modelling involves exploring and evaluating potential strategies used for the reengineering of the business processes.
- Requirements Management:** obtaining, organising and processing and finally documenting the requirements. Working along with the project stakeholders closely to understand their requirements and needs is part of requirement discipline.
- Implementation:** understanding the design model and transforming it into a source code by implementing components and finally integrating it together with sub-systems and into the complete build.
- Test:** the three types of tests: integration, system and acceptance test are part of test discipline activities. That means both defining, planning and developing use cases to run tests on the project and, also, reporting the bugs/error found.
- Deployment:** finalising the project, packages, scripts and end-user documentation for it, along with any other tasks required to supply the user with the complete end product software. That also means to develop support and operational material along with all the necessary packages for deployment and training the end-users as well.
- Project management:** planning and monitoring tasks for better management of the project through initiating a new project, management of staff, management of risk factors, planning and scheduling sub-tasks, doing iterations and completing the phase/project.
- Configuration and Change Management:** it includes everything about the version and after release and change request management and also consists of the configuration controls and its status by keeping track through monitoring. Baselines and releases management is also part of it.

h) Environment: processing materials for individual project teams, adapting to the project's or organisation's needs and introducing tools according to them and making sure all the tools etc. are appropriately installed to support the development of the project.

## **1.2. The phases of RUP**

Each software lifecycle is broken into smaller cycles, and each cycle represents a new generation of the software. RUP divides each development cycle into four phases. And each phase ends with a milestone. A milestone is a point or place in the process where certain decisions must be made, and certain goals are achieved.

RUP is a software development process that combines linear and iterative structures. It's four phases are Inception, Elaboration, Construction, and Transition (McManus, 2004). Every stage is done in many iterations except Inception. All other development process stages like requirements, design, testing, etc. are done corresponding with these four stages of RUP. Although the intensity is different, it helps build stable and flexible solutions. However, this software process is not the same as other Agile models like SCRUM and XP. It is not as efficient as other models of Agile. It is not as quick and adaptable as others. Customer involvement, iterations and their intensity vary depending on the project requirements.

The details of each phase are given below (McManus, 2004):

1) Inception Phase: the process of RUP starts from the first stage of Inception. In this phase, the idea of the project is proposed. Some of the milestones for this phase are a requirement document, general use case models and risk factors assessment.

2) Elaboration Phase: in this stage, the team developers evaluate the architecture and requirements of the project. Some of the milestones for this phase are use cases which have their actors identified, more in-detailed risk assessment and a general manual for users.

3) Constructions Phase: during this process, all the remaining features and functional components are developed and integrated into the build model to combine into a complete product. In this phase, all the processes, costs, quality, operations and resources are optimised. Some of the milestones of the phase are manuals, a complete product and description of the current software.

4) Transition Phase: in this phase, the product is released to the users. At the time of deploying to the users, issues might arise, which needs debugging and correcting the problems. Because of this, sometimes the new release is produced, and new features are added to the existing product. Some of the milestones are completed testing, properly operational databases, training of end-user and management and finally deploying the product to the market.

## **2. Best practices deployed by RUP**

RUP effectively applies proven approaches on the software development process and the team responsible for it successfully obtains its objective. These practices are observed in successful organisations in the industry and they are given below (IMQS *et al.*, 2015):

1) Develop the software iteratively: due to the changing times, no software can be designed, built and implemented through the sequential process methodology

without there being a need to retouch some part of the software due to some new update in the technologies or in the operating system etc. for this reason RUP allows the developers to iteratively go over the software in the process of development which helps in getting a deeper understanding of the particular problem through successive refinements and incrementally provide an effective solution over each iterative.

2) Requirements Management: RUP provides a way to obtain, organise and document the specified requirements and constraints, and make trade-offs and decisions. This is achieved through scenarios and use cases, which have been proven to provide the best way to capture functional requirements. These also help in tracing the requirements throughout the whole development process.

3) Component-Based Architecture: RUP provides support for component-based software development. Components are sub-systems that help in fulfilling a requirement. Through the use of new and existing components, RUP provides a systematic approach to defining an architecture.

4) Verification of Quality: one of the most important parts of software development is ensuring that the client receives a quality product. That means reviewing the functional requirements as well as the non-functional requirements to make sure that everything is in working state.

5) Model Visual Software: different models are used to communicate different aspects with different stakeholder. Through the usual visual models, we can capture the behaviour and structuring of the components of the required software.

6) Control Changes: because of iterative changes, it is necessary to be able to trace each change in the software. It is also needed to make sure that each change is accepted. Controlling, tracking and monitoring the changes to be able to integrate each iterative change successfully, are all part of this process.

### 3. Conclusion

Rational Unified Process (RUP) is an incremental software development process which delivers releases over time with improvements per release while following the best practises along the way. The four phases of RUP provide a sequential and iterative approach to the development of a product. The workflow is divided into logical activities that are nine disciplines, and are maintained and performed throughout the four phases. RUP is not only a system development process but is also a mindset, which can be implemented with any process or project.

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## PUBLIC BUDGETARY DECISION METHODS

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**Abstract:** *The application, in the process of substantiating the public expenditures, of the modern methods of the analysis on objectives allowed a better rationalization of the state budget. In this sense, the methods, offered by the system analysis, were the basis for formulating public elections. In the last five decades, budgeting has developed in a natural and spontaneous way, rather than in a planned way, based on empirical rather than theoretical ideas and has been strongly influenced by political systems, economic theories, management approaches, accounting principles and the conduct of public administration which becomes the main instrument of the government's attempts to manage economic growth and development. The budget reflects the program of governing the winners of the political competition, and the budgetary documents, which they record, the result of the political process. As the prosperity of any economic structure is largely conditioned by the efficiency of the decisions taken by managers at each hierarchical level of management, in the budgeting process new tools have been developed and accumulated, methods that have been conditioned by the need of public authorities to it adapts to the conditions of competitiveness, to the identification of reserves to reduce costs and to increase the attractiveness of investments.*

**Keywords:** Public budget, budget rationalization, budget expenditures, system analysis, discount rate; updated surplus

**JEL classification:** E60; H54; L38

### 1. Introduction

The study that is the subject of this article aims to apply a method of analysis by objectives, in terms of the process of substantiating public spending. The methodology of the scientific research of this paper was carried out through some approaches review, ideas and opinions regarding the rationalization of budgetary choices. In this sense, the system analysis provided methods that formed the basis for the formulation of public elections and a better rationalization of the state budget. The decision-making process has been and continues to be the focus of research in various fields: management science, operational research and psychology. In recent years, multicriteria analysis, expert systems, information technologies, etc. have been added to decision-making, in which the results from the listed fields are used. Given that public authorities are endowed with multiple responsibilities and missions, especially in the economic and social field, it became necessary to assess the effectiveness of their various actions. Public spending

decisions and the collection of public revenues over a period of time at the central or local levels of government have made the public budget a key variable in determining gross domestic product and the level of resource use. However, the budget is not only a technical, quantitative text, which refers to the decisions of public authorities, but also a political text, the budget reflecting the program of governing the winners of the political competition, and the budgetary documents, which it records, the result of the political process. The increase of the budget efficiency was achieved in a first approach, through financial decisions regarding the regrouping of public expenditures that were distributed on administrative criteria, in more significant categories from the point of view of financial and economic analysis, the administrative budget being doubled by the functional one.

## **2. Approaching the methods of budgetary rationalization in the specialized literature**

Decision making is one of the oldest problems, which mankind has sought to solve during its existence. With the advent of operational research, decision-making began to use mathematical methods, and later it was assumed that any problem of achieving the proposed goal was reduced to choosing an optimal alternative from the set of admissible ones, ideas that prevailed in the 50s of the twentieth century of systemic analysis. Finding a solution in terms of decision-making problems, were the subject of several researches during the 60s and 80s of the last century and led to the development of a mathematical device for solving optimization problems of various kinds. According to the Romanian economist I. Văcărel "regardless of the technique of sizing expenditures and making the decision on the short, medium or long term use of state resources, practiced by each country, modern methods of rationalizing budgetary options are based, in mainly, on the cost-benefit or cost-effectiveness analysis, the applicability of which is conditioned by the existence of two or more solutions to achieve an objective, with different costs". Consequently, the specialized literature offers us several methods for evaluating the efforts and direct and indirect effects of the projects of public objectives, the most frequent being: cost-benefit analysis, which is also known as cost-benefit analysis, analysis cost-effectiveness, based on a broader meaning than the economic one, attributed to the advantages, cost-utility analysis, cost-minimization analysis, etc. R. Smith and T. Lynch argued that "rational decision-making requires the examination of budgetary decisions using a set of analytical objectives and techniques to help discern the best possible decision." Over time, however, modern approaches to decision-making problems have shown that decision-making is not only a process of calculating and estimating quantitative properties of alternatives, but also a complex approach to several individual factors. A decision is also influenced by the decision-maker's experience, his preferences, his professional skills but also his vision and attitude on the problem. The principles of the systemic approach, which are promoted, are in fact a generalization of human experience of working in complex systems.

## **3. Budgetary decision methods**

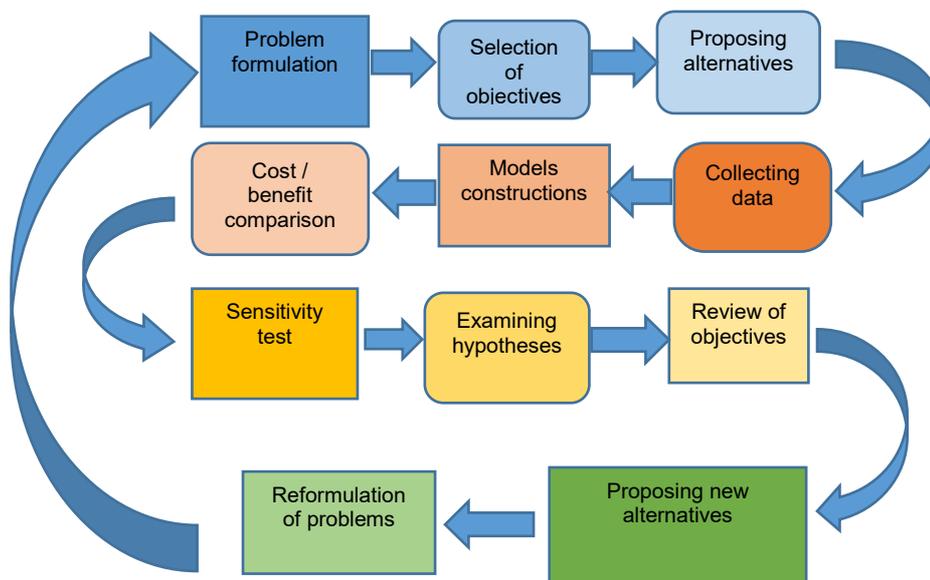
In the literature, system analysis is defined as the analytical and methodological stage intended to help the decision maker to determine a preferential mode of

action, among several possible alternatives. It has been shown, over time, that there is a discrepancy between the logical idealism of optimization and the desire and ability of the decision maker to accept this optimum, which decision support systems mitigate. These support systems have been successful due to the concept of the pragmatic way of cooperating the decision maker with the computer system and focusing on those aspects, which are specific to the person, on a friendly system technology, which uses analytical methods and multicriteria optimization, methods artificial intelligence, especially expert systems.

The decision maker is the one who initiates and controls the decision-making process with its personalized objectives, the one who interprets the results and determines the choice of the solution. This approach is adapted to the political and economic choices made by public decision-makers in the management of ministries' financial resources. For example, the distribution of expenses of the Ministry of Health for obtaining a significant decrease in mortality.

The chosen method consists in the progressive formulation of effective strategies, starting from combinations of means and taking into account restrictions regarding these limited means. The possibility of achieving an objective by using alternative means of systems requires the use of quantitative selection criteria, usually using the maximization of the cost-benefit ratio.

The assistance of the decision maker by these methods consists in helping him in the operations with the objective factors in which he is less efficient during the decision-making process and includes:



**Figure 1**

**Source:** *Own elaboration*

The figure presented above reveals that the chosen method is an iterative one, which allows the improvement of the formulations of the objective to be achieved, according to a circular sequence of sliding planes.

#### 4. Benefit-cost effectiveness ratio

In order to use an appropriate tool for the selection of projects facing budgetary constraints, updating is the most common technique, which makes cash flows (cash flows) comparable. The update approach requires defining an update rate. The discount rate can be considered as a corrective factor to take into account the principle of time in evaluating investment projects. As a result, as the costs and benefits of the project manifest themselves at different time intervals, it is necessary for the financial flows to be calculated when the investment projects are analyzed, using the discount rate.

In order to allow the public decision-maker to choose between alternatives and projects with unequal time horizons, the costs and benefits are expressed at their current value, taking into account the phenomenon of monetary depreciation. The discount of the future value considered can be achieved using a discount rate (r), which can be either the interest rate (d) or the bond rate (p).

Applying the discounting technique, public investments (or any public service with a time horizon) become profitable when they allow to obtain a positive discounted surplus ( $V_a > 0$ ), it being sufficient to compare the flow of discounted benefits (B) with the current cost of initial investments (A)

$$V_a = -A + \sum_{i=1}^n \frac{B_i}{(1+a)^i} > 0$$

Where  $V_a$  = updated surplus;

A= current cost of the initial investment

B= flow of benefits

a= discount rate

n= number of years included in the forecast period

For example, we will consider the following data:  $A = 10,000$ , the number of years included in the forecast period is 5 years so that  $B_1 = 1.000$ ;  $B_2 = 2.500$ ;  $B_3 = 2.000$ ;  $B_4 = 3.000$ ;  $B_5 = 3.500$  and the bond rate is 5%. Applying the update technique, we will have

$$\begin{aligned} V_a &= -10.000 + \left( \frac{1.000}{1+0,05} + \frac{2.500}{(1+0,05)^2} + \frac{2.000}{(1+0,05)^3} + \frac{3.000}{(1+0,05)^4} + \frac{3.500}{(1+0,05)^5} \right) = \\ &= -10.000 + (952 + 2.267 + 1.727 + 2.468 + 2.742) = -10.000 + 10.156 = +156 \\ &> 0 \end{aligned}$$

Thus, it can be appreciated that the investment is advantageous, but not particularly profitable, a slightly more pronounced depreciation than that expressed by the discount rate can make the investment inefficient.

#### Conclusion

From a management point of view, the administrative budget remains the essential document, allowing a precise description of the means available to each spending

ministry. The introduction of cost considerations was made through the functional budget, in which the distribution of budgetary endowments does not systematically correspond to the scope of action of the spending ministry. Over the last decades of its existence, the budgeting system has been actively developed and improved. Studies have shown that budgeting comes as a universal applied technology, the well-developed functional distribution must allow the calculation of the amount of global appropriations, starting from the evolution of the basic costs of certain public services. The further development of the budget makes it adapt to the new trends, namely: a modern model - performance-based budgeting. Through budgetary decision-making methods and criteria, public authorities can determine a preferential mode of action from several possible alternatives.

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## POTENTIAL MARKET INSTABILITY OF THE FOOD INDUSTRY (2020)

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**Abstract:** *Risks have now become an integral part of society and the economy. When examining processes in any area of life, we make a primarily subjective decision when taking a given risk, but there are quantitative tools for estimating the probability of a risk occurring that increase the value of qualitative decision-making due to the available data. In the course of my research, I considered it important to examine the question of how company managers judge the importance of certain risk factors influencing their activities and the suitability of tools and methods to manage or reduce them, as they greatly influence producers' risk management strategy. By writing my study, my further goal was to analyze the main activities of food companies and thus the technological factors influencing quality production, and with this knowledge I help the company to improve their production efficiency, profitability and reduce the risks in production.*

**Keywords:** food industry, risk factors, technology, economy,

**JEL classification:** G32

### 1. Introduction

The success of a food business depends on many factors, such as the market price, the political situation, the different natural environments and the economic effects in which one has to face some risk. Risks must be coexisted and minimized as far as possible. avoid or minimize the risk has a price, and the decision-maker should consider taking the size of costs in order to reduce the risks (Szucs, 2018).

I consider research on risk factors to be particularly important nowadays, as there may be a number of technological risks that affect companies' decision-making processes and cost, revenue and income ratios. Companies aim to always achieve higher incomes one way or another (Moschini and Hennessy, 2020). In my studies, I present the risks that can affect today's food companies.

Regardless of how the risk is analyzed, the most important condition is that the cost of the risk analysis does not exceed the magnitude of the risk. Taking risk is an integral part of the company, as it is the driving force of innovation and development (Nádasdi and Zarádné Vámosi).

### 2. Today's risks

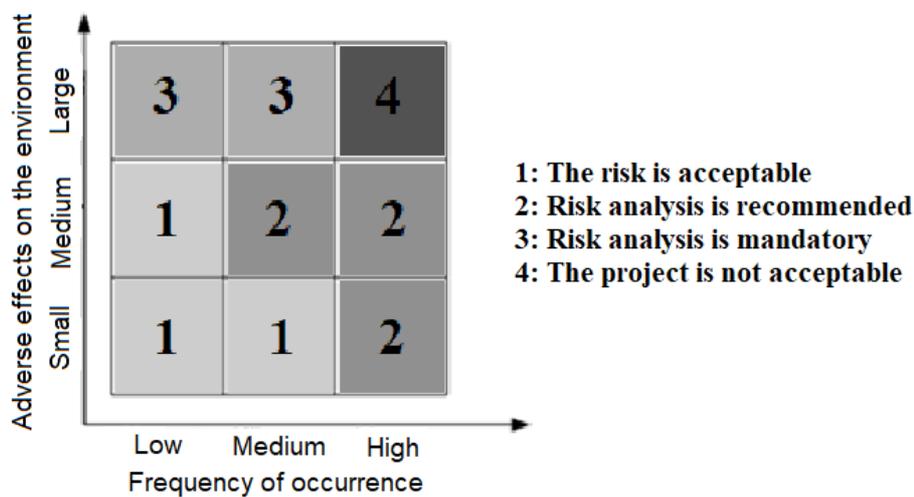
Nowadays, the operation of most companies is unthinkable without the support of IT tools, but these new technologies greatly increase the risk of corporate operation. An additional difficulty is the number of organizations, the different types

of risk profiles, and therefore it is not possible to develop a specific IT risk management guide for all companies (Fong-Woon and Muhammad).

The technological advances that form the basis of modernization have simultaneously eliminated the dangers and risks posed by nature and become the cradle of new risks. Instead of the problems of resource allocation, the risks arising from the production, definition and distribution of scientifically and technically produced risks come to the fore (Stolbov and Skckepeleva).

In the case of food manufacturing companies, company managers think as follows: the basic unit of technical risk is the average expected value of the probability of occurrence of events that have a negative, unwanted effect on people and the environment. In this case, the risks and impacts can be objectively measured and the magnitude of the risk can be determined by the probability-weighted negative impacts.

Companies may assess a low-probability but high-impact risk differently than a more likely, less severe one. The most common method for assessing risks is the risk matrix, which is used to determine the significance and priority of risks (Figure 1). A matrix is a two-variable "weighting" procedure in which one variable is the degree of effect and the other is the probability of risk occurring. Risk values are most often expressed in text (low, medium, high).



**Figure 1:** Risk matrix  
Source: Own editing, 2020.

According to a survey by Symantec (2019), 60 percent of corporate executives expect at least one more serious IT asset failure each year and at least one loss event involving severe data loss every 5 years. These figures also reflect the real data well, so it is understandable that food companies also attach importance to the proper management of emerging hazards. Due to the central role and vulnerability of corporate governance systems, nowadays it is essential to map the threats to IT systems and to properly manage and manage the risks.

Deutsche Bank chief economist Torsten Slok has written a list of 20, which will list the biggest risks to market stability in 2020. The economist is primarily concerned

about social inequalities and trade, but he also lists a number of policy factors on his list. Here are some points that may be relevant for food companies:

- The evolution of the trade war.
- Uncertainty caused by trade war can make its mark on corporate investment decisions.
- Economic growth in China, the European Union and Japan will continue to decline, leading to an appreciation of the dollar.
- Possible changes in competition law, legal and technological regulations related to privacy.
- The declining appetite of foreigners for U.S. loans and government securities after the election.
- Due to the mismatch between supply and demand for government securities, another repo rate jump occurs.
- Lending conditions will tighten.
- Due to declining corporate profits, companies may have less money available for share repurchases.

### **3. Risk factors in the food industry**

The success of a food business is mainly characterized by income. The simplest way to measure the risk of profitability is by the standard deviation of income, because the larger the standard deviation, the riskier the business can be considered.

The goal is to reduce the incidence of risks and to avoid that risk, thereby minimizing the potential effects of risks in order to optimize business decisions and keep income close (Hornai, 2001).

According to Abhishek (2013), risk management is not needed to increase profits in the future, but rather to enable companies to turn profits made under just favorable conditions into more unfavorable conditions, thus ensuring a sense of security for those who avoid risk.

According to Walker (2001), the right choice of risk management tools can give a firm a significant competitive advantage as it reveals the real benefits and costs of the firm's activities. Production and risk management decisions are closely related, as most production decisions have risk implications.

Holmes (2002) explains that the essence of risk management is that companies thoroughly develop and adhere to procedures enabling financial losses to be identified, controlled, and reduced. It is important for employees and the owners and managers of the company to know the potential risks affecting the company, to identify, identify and then analyze them so that they can manage the risks from different sources immediately.

Risk management includes all activities in which the probability of a hazard occurring is reduced to an acceptable level and harm can be avoided or mitigated (Chong, 2004). According to Chapman (2006), risk management is nothing more than the control of risks to the greatest extent possible, thus helping businesses to make the most of their opportunities.

#### 4. Conclusion

The identification of risks requires caution and thoroughness so that a risk that poses a serious hazard does not escape attention. It is impossible to account for all the risks that arise, so it is worthwhile to make a list that focuses on the risk factors that can have a significant impact on achieving your company's goals.

With regard to all the described risk management procedures, it can be said that although the examinations, strategies and tools used in risk management can be classified in several ways, the different classification methods more or less overlap. The main purpose of each is for the company to prevent the hazards or reduce the consequences of the hazards that have occurred.

It can be said that risk management contributes significantly to increasing the performance, value and competitiveness of enterprises in the context of dynamic changes in the external and internal environment.

#### Acknowledgements



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## METHODS IN ENTREPRENEURSHIP EDUCATION. EVALUATING RESEARCH IN CONTEXT USING SCITE

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**Abstract:** *Any research endeavour opens up loads of data to be evaluated. Special attention is given to highly cited papers. But how can qualitative data be extracted and correlated from entire research collections, faster and better? We analysed a tool called scite, using it for studying a collection of research articles dealing with the theme of methods in entrepreneurship education. We found out that scite is offering an innovative solution – interacting with data in a contextualized form. A research document or a collection, through scite, can be instantly evaluated using three classification parameters (supporting, disputing, and mentioning statements). For each claim, the reader can see the context, read the fine print, read the full document or explore other related publications.*

**Keywords:** economic education, entrepreneurship education and training, bibliometrics, research in context, scite.

**JEL classification:** C19, L26, I25

### 1. Literature review

Entrepreneurship has long been recognized as an imperative for economic and social development. Moreover, the rise of international mega-economies on the Eastern front (India, China) challenged the Western world to up the game and respond (Kiesner, 2010). The entrepreneurial imperative is transnational and global now.

Leadership at highest levels of government have recognized the need for revitalized initiatives towards propelling enterprise creation and understood the vital role of entrepreneurship education and training (EET) in attaining this. Through a series of policies and programs, European Commission continues to uphold entrepreneurship, proposing areas of immediate intervention and supporting entrepreneurs in general (the new enterprises), specific groups (i.e. youth, women), and EU citizens by fostering entrepreneurial learning and entrepreneurial mindset (European Commission, 2016).

EU's scope for entrepreneurship education (EE) seems to be wide enough for such a purpose. On first hand, it considers the full spectrum of education – from primary, to secondary, vocational, higher and adult education (European Commission, 2013). Secondly, it permeates horizontally the whole educational process by aiming to create an entrepreneurial mindset in all learners. Such mindset is recognized as a key ingredient of endogenous growth. In this way, the creation of transversal competences such as sense of initiative and creativity enables the young people to develop their capacity to be flexible, to innovate, be creative,

autonomous, to manage projects and achieve results (European Commission, 2012) – in one word, to become entrepreneurial. It is no surprise that EE has become one of the fastest growing fields of study globally (Sirelkhatim and Gangi, 2015), with entrepreneurship and management courses reaching many other non-business curricula.

Among the challenges faced in proliferating EE outcomes is the discussion on the methods used for teaching entrepreneurship, how to determine the acquisition of knowledge and the instilling of behaviours. The literature in this field shows a merger of theory, practice, and actual observation of what entrepreneurs do, how they are learning (Harmeling and Sarasvathy, 2013).

Although primarily taught as a process, entrepreneurship is in fact rather unpredictable. Thus, according to P.G. Greene from Babson College, teaching entrepreneurship must utilize a portfolio of complementary techniques. She is recommending four such techniques (Greene, 2020): (1) starting businesses, (2) serious games and simulations, (3) design-based learning, and (4) reflective practice. Their purpose is to position the students beyond a theoretical framework of study where they learn about entrepreneurship, to a creative, actionable framework, learning through entrepreneurship.

The methods suggested by literature are diverse (Sirelkhatim and Gangi, 2015) reflecting that the discussion on entrepreneurial learning is a potent one. It is evident that this field of study is still in need of further investigation. This paper intends to contribute to this discussion by bringing into focus a tool for examining research in a contextualized form.

## **2. Research aim and methodology**

Research streams that are part of a vigorous and dynamic discussion face the challenge of an informational flood, with valuable ideas missing their momentum. The incapacity of seeing the research in context, to build upon supporting studies or acknowledge the disputing ones impacts negatively the research dialogue, interfering with its ability to reach best answers, faster.

This study's aim is to explore the research on the methods of entrepreneurship education and identify how are the studies reacting - supporting, disputing, or simply acknowledging each-other's claims.

In doing this, we have employed the use of a new tool called *scite* ([www.scite.ai](http://www.scite.ai)). With the use of artificial intelligence (AI), *scite* classifies each article citation as belonging to one of three categories - supporting, mentioning or disputing. In order to do this, *scite* extracts the citation statement, parsing the citation context (approximately three sentences around the in-text cite), then it matches the citation to the reference following with the matching of the reference to the correct metadata in Crossref. Utilizing machine learning models, *scite* is able to attribute a label to each citation.

The stated purpose of the tool is to help advance citation indicators beyond quantitative data and metrics, to provide more qualitative and contextual data. The main function is to search individual research papers and visualize the associated metrics, as well as the citations contexts. New functions added in 2020 late-summer allow for collections of research papers to be evaluated. For this study, the methodology followed a two-step path. First, we gathered a collection of research papers with the use a Web of Science platform. The query used was: *Topic:*

(entrepreneurship education" AND methods) Refined by – *Document types*: (ARTICLE) and *Web of Science categories*: (EDUCATION EDUCATIONAL RESEARCH OR BUSINESS OR MANAGEMENT OR ECONOMICS) *Timespan*: All years. *Indexes*: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI, CCR-EXPANDED, IC.

Following the search, 213 articles were found meeting the criteria. The second step was that we extracted the DOI numbers of the articles (some articles did not have a DOI number so we were left with 196 articles) and introduced them in the Dashboard function of *scite*.

### 3. Findings

The *scite* tool yielded a dashboard summarizing the analysis' results, as seen in Figure 1.



**Figure 1:** Entrepreneurship Education Methods – dashboard results

Source: [www.scite.ai](http://www.scite.ai)

With this information available, we were able to identify the most supported, disputed or mentioned research papers in our collection. Because of space restriction we will present here the top 5 articles in each classification.

Title ↓	Supporting ↓	Title ↓	Disputing ↓	Title ↓	Mentioning ↓
<a href="#">Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes</a> 2013 Martin et al.	17	<a href="#">Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes</a> 2013 Martin et al.	3	<a href="#">Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes</a> 2013 Martin et al.	363
<a href="#">Factors affecting entrepreneurial intention levels: a role for education</a> 2010 Liñan et al.	12	<a href="#">The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs</a> 2016 Maresch et al.	2	<a href="#">Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning</a> 2004 Honig et al.	309
<a href="#">The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs</a> 2016 Maresch et al.	4	<a href="#">Factors affecting entrepreneurial intention levels: a role for education</a> 2010 Liñan et al.	2	<a href="#">The pedagogical side of entrepreneurship theory</a> 2001 Fiet et al.	146
<a href="#">New horizons in entrepreneurship education: from teacher-led to student-centered learning</a> 2016 Robinson et al.	3	<a href="#">Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning</a> 2004 Honig et al.	2	<a href="#">Factors affecting entrepreneurial intention levels: a role for education</a> 2010 Liñan et al.	145
<a href="#">The pedagogical side of entrepreneurship theory</a> 2001 Fiet et al.	3	<a href="#">The development of entrepreneurial potential among higher education students</a> 2015 Varamäki et al.	1	<a href="#">Entrepreneurship Education: Known Worlds and New Frontiers</a> 2010 Neck et al.	135

**Figure 2:** Top 5 articles with supporting, disputing and mentioning classifications

Source: [www.scite.ai](http://www.scite.ai)

Each claim can be analysed in its context; seeing the citation in its immediate textual surrounding helps the reader clarify the data nuances. The tool also allows us to see what paper section the citation is part of (introduction, results, methods, discussion, other sections) and the type of article that cited the work (journal article,

preprint, book or book chapter, other types). A link to the full article is provided for further study. In our case, Martin et al.'s article *Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes* places first in all claims classification. Out of the three disputing claims, one is in a book, two in articles, all being part of *other sections* of the papers. Out of 17 supporting citations, one was part of the *results* section, seven were within *discussion*, and nine in other sections. The great majority (15 out of 17) of supporting statements are made within *articles*, one in a *book* and one in *other types* of research documents.

The tool can be used also directing it towards personal research work and see how the community of fellow researchers interact with our own studies. In this sense, the tool offers the feature of citation alerts in regard to own work or other articles that present high interest.

#### 4. Conclusion

Building on the example of EE's methods, we acknowledge the premise that nowadays' flood of research data needs to be addressed with objectifiable tools which to allow for proper and transparent interaction with data, in a contextualized form. *Scite* seems to be such a tool, forespeaking in a sense the potential of future research analysis with the help of AI. As with any application or tool that is pioneering new methods, there are limitations that come from potential technological disfunctions as well as limitations coming from the business aspect of the tool (in order to evaluate massive quantities of research data, access to journal platforms is needed). Important steps have been made to counteract these limitations so much so the analyses conducted through *scite* can be reliable. The human factor is not eliminated completely; the reader can review classifications and challenge AI's claims on statements. Regarding future, sky is the limit in what means to attribute qualitative insights to research data and metrics using the new technological advancements of nowadays.

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## **PUBLIC GOVERNANCE: CONCEPTS, THEORIES**

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**Abstract:** *In the past three decades of public administration reform, the “governance” term has gained ground both in the academic debate and in the political and managerial rhetoric, often at the expense of the “gouvernement” term or as a fight back from New Public Management ideas. Today, the term “governance” is used in different contexts. At geopolitical levels, for instance, it is used to characterize global governance, national governance, local governance, and so on. It is used in various public spheres including economic governance, social governance and environmental governance. The key of success arises from its conceptual vagueness and interpretative flexibility. Different public governance research clusters have been compared: Dutch, Anglo-Saxon, Scandinavian, German and Italian literature. Important differences, either with reference to the contents or related to the research approaches in use, are found to exist between and within these clusters. Nonetheless, some common elements are included in the “public governance” concept. The findings have important implications, both operational and for future research.*

**Keywords:** Public governance; economic growth; Besturen

**JEL classification:** A14

### **1. Introduction**

Public governance is an essential determinant of long-run economic growth. Although consensus is lacking on the definition of governance, Kaufmann, Kraay and Mastruzzi (2010), considering various definitions, view governance as ‘the traditions and institutions by which authority in a country is exercised’. Therefore, governance is defined as the process of the selection, monitoring and replacement of governments; the power of the government to effectively establish and perform sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them (Kaufmann, Kraay and Mastruzzi, 2010, p. 3). The impact of governance on economic growth was disregarded by neoclassical growth theory, but public governance became an important component of economic growth with the emergence of endogenous growth theories in the late 1980s.

### **2. The international literature on public governance**

#### **2.1 The Anglo-Saxon literature**

The Anglo-Saxon literature is one of the richest on public governance and many continental European researchers refer to it, although sometimes highlighting limitations of its application in differing sociopolitical contexts. One of the most prominent authors is Rhodes (Rhodes, 1992, 1996, 1997, 1998, 2000).

Bovaird and Löffler (2001, 2002) have also documented an “emergence of the governance wave”, which they define as “the way in which multiple stakeholders interact with each other in order to influence their quality of life” (Bovaird and Löffler, 2003). Frederickson (forthcoming, 2005) proposes a governance theory in three parts: vertical and horizontal inter-organizational cooperation; extension of the state by contracts or grants to third parties; and forms of non-governmental policy-making and implementation. Frederickson (forthcoming, 2005) proposes a governance theory in three parts: vertical and horizontal inter-organizational cooperation; extension of the state by contracts or grants to third parties; and forms of non-governmental policy-making and implementation.

## **2.2 The Dutch literature**

The Dutch contributions to the study of public governance (besturen) is the most conceptually advanced and also more extensive than work undertaken elsewhere. It includes very well-known authors as Walter Kickert and Jan Kooiman and encompasses many years of research on this topic. Much of this work is underpinned by the socio-cybernetic systems theory and by the Luhmann's notion of auto-poietic systems (Sibeon, 1999, p. 13). In particular, the emphasis on the socio-cybernetic approach to governance, represented as an interactive process between many actors, none of which enjoys effective authority over the others, has played a dominant role (Pierre, 2000, p. 8). Kickert (1993a, 1993b, 1997a, 1997b, 2000, 2003) considers public governance as the influence that the public administration exercises on social processes inside complex networks composed of autonomous but interdependent actors, each of them following its own objectives and interests, which may, sometimes, diverge. The most significant attribute of the model is its aptitude to coherently integrate traditional models of government with innovative approaches such as network management.

## **2.3 The German-speaking countries literature**

The German literature can be considered as opposite to the Anglo-Saxon one. Regarding the Swiss literature, (Schedler, 2003) defines public governance as the structure and processes that ensure democratic decision-making and a reliable public administration. The governance definitions by German-speaking researchers (see for an example Mayntz, 2003), are focused on collaborative relationships and inter-institutional networks, through which participation in policy making and implementation.

## **2.4 The Scandinavian literature**

The position taken by the Scandinavian authors rests in the middle between Anglo-Saxon and Dutch/German literature. Some authors, such as Björk and Johansson (1999), emphasize public governance elements already traced by Anglo-Saxon authors (Rhodes, 1996, 1997; Peters, 1993). In relation to these two authors, governance is a macro level theory and not normative. On these conceptual and methodological grounds, Björk and Johansson (2001, p. 3), define governance as a coordination mode of different actors, which can be investigated either from a

structural point of view (hierarchy, market and heterarchy), or focusing on processes (steering and adaptation). A different point of view is offered by Edlund (2001), critical with regard to the application of Anglo-Saxon governance theoretical frameworks in Scandinavian countries, such as Sweden.

### **2.5 The Italian literature**

The Italian literature on public administration and management has only recently, with few exceptions, become interested in the governance theme. One of the early authors researching the issue, (Meneguzzo, 1995) defines governance as the structure of the social and political system, developed as a result of the interaction and intervention of different actors. The concept represents the public administration system's relations, both horizontal and vertical. Another Italian author (Rebora, 1999, p. 70) interprets public governance pointing towards the reform processes of the last two decades. Subsequent studies (Meneguzzo, 2004) highlight the evolution of governance in the Italian public administration, with particular focus on the local and regional levels and on specific sectors such as economic development, healthcare, cultural and heritage management, etc. In Romania, the executive power and the Parliament focused mainly on establishing a legal framework for corporate governance of public enterprises the legal framework which, even if it materialized quite late (2011) is in my opinion an absolutely necessary step for public companies.

### **3. Good practices**

The role of internal audit in the public sector ; the function of internal audit is to provide independent and objective assurance and consulting services ,designed to add value and enhance an entity's business. Internal audit helps an entity achieve its objectives by applying a systematic and methodical approach to assessing and improving the effectiveness of governance, risk management and control processes. Internal audit assessments can cover a wide range of topics , for example, cost-benefit or the prevention and detection. For public sector management bodies , a good practice would be to set up an audit committee or an equivalent group of function, in accordance with best practice in the field , it is recommended that a majority of the members of an audit committee be independent external members. The Committee can play an important role in: helping to improve the adequacy and effectiveness of risk management and internal control processes, promotes the principles of good governance and their application in decision-making , oversees the internal audit function and supports the quality of its activities , in particular by supporting the organizational independence of this functions, strengthens the objectivity and importance of external audits and therefore the effectiveness of the audit function , raise awareness of the need to ensure sound risk management and rigorous internal control and to implement recommendations made following internal and external audits, helps the entity integrate the values of ethical governance , including effective anti-fraud and anti-corruption measures (International framework for good governance in the public sector 2014, pp. 29-30).

#### 4. Conclusions

Literature review and analysis on public governance indicate the high complexity of the concept and give evidence of different approaches and definitions, influenced by many variables such as the disciplinary sector, the research aims, the geographical and cultural context of the researchers, administrative traditions and reform trends. Public governance is an essential determinant of long-run economic growth. The Dutch contributions to the study of public governance (besturen) is the most conceptually advanced and also more extensive than work undertaken elsewhere and the Anglo-Saxon literature is one of the richest on public governance and many continental European researchers refer to it.

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## FROM A TRADITIONAL TO A MODERN CONSIDERATION OF TOURISM DESTINATION CONCEPT

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**Abstract:** *The tourism destination holistically approached groups all the elements/factors that facilitate the development of tourism activities in a specific area, region. The intensification of the tourism circulation, namely the redirection of tourists' behaviour on buying has led to the increase of tourism destination competitiveness. The study of specialised literature regarding the conceptualisation of the tourism destination reflects, over the past decades, different approaches (geographical, economic, system, network, smart tourism destination, sustainable tourism destination). The changes that have occurred in all spheres of activity have shifted the direction of specialists in defining this concept. The purpose of this paper is to offer a review on the specialised literature regarding the definition of the tourism destination by analysing the different approaches that have been stated as of the 70s until today.*

**Keywords:** tourism destination, approach, tourists, system, networking, smart tourism destination, sustainable tourism destination.

**JEL classification:** M1; Z3; Z310; Z32.

### 1. Introduction

The tourism destination represents one of the concepts of wide circulation in specialised literature and it also represents the grouping of all activities performed by service providers for attracting a number of tourists as large as possible and obtaining some competitive advantages. By following several points of view that have been formulated during the last decades, we can notice some directions in the attempt of defining this concept: geographical areas within the perimeter of which different natural and anthropic tourist attractions are found; products to be selected based on cognitive, affective processes; entities within which several parties interact: tourism service providers, local authorities, governmental bodies, tourists, residents; places that offer a unique experience to visitors/tourists; well-defined spaces, endowed with a series of facilities that contribute to the sustainable development of the areas and last but not least to the welfare of the locals.

### 2. Methodology of the research

The main objective of this paper is to offer a review of the specialised literature regarding different approaches formulated on the definition of the tourism destination concept. Furthermore, this paper aims to present different theoretical

points of view formulated in the attempt to capture the elements that have influenced and still influence the success of tourism activities.

The period of the research: October - November 2020.

In order to achieve the objectives of this paper, the following steps were taken: the study of the specialised literature using Google Academic and Web of Science database search engines; the selection of relevant articles (published between 1970 - 2019), taking into account the number of quotations; the review of the main points of view regarding the studied problems; the issuance of some new work hypotheses and the formulation of some conclusions.

### **3. Different consideration of tourism destination concept**

#### **3.1. Traditional/geographical approach**

Georgulas (1970, p. 7) states that "tourism as an industry occurs at 'destination areas' – areas with different natural and/or man – made features, which attract non – local visitors (or tourists) for a variety of activities".

Medlik & Middleton (1973) define the concept as a product that involves five elements: tourist attractions, facilitations, accessibility, image and price.

Leiper (1979, p. 397) considers that "Tourist destination regions can be defined as locations which attract tourists to stay temporarily, and in particular those features which inherently contribute to that attraction." Leiper attributes to the tourism destination the following features: locations that temporarily attract tourists through their valences.

Metelka (1990) defines the concept as being a location to/towards which a person travels.

#### **3.2. Economic approach**

Lew (1987) offers a different perspective in relation to the previous approaches. He defines the tourism destination as a grouping of ideographic, organisational features and/or that based on knowledge.

Baloglu & McCleary (1999) see the tourism destination as a product whose attributes are evaluated by means of several cognitive and emotional processes.

Buhalis (2000) suggests a definition that places in the forefront the uniqueness of the tourism destination, having a political and legislative framework in order to ensure the promotion and planning of tourism activities.

Bornhorst, Ritchie & Sheehan (2009) suggest an approach based on tourists' experiences.

Saraniemi & Kylänen (2010) emphasize the experiences lived by tourists as result of the actions of the involved parties (service providers, public bodies, residents, tourists).

Hailin Q., Hyunjung Kim & Holly Hyunjung Im (2011) formulate a definition according to which the tourism destination must be unique and different in order for it to be chosen by the tourists. Ahmad, Jusoh & Hussain (2012) view the tourism destination as a concept that offers satisfaction to tourists by maximising the space, the activities and the products.

Kim (2014) considers the tourism destinations as being created from a variety of attributes/characteristics that have a significant impact on visitors in different stages.

### **3.3. System approach**

Mitchell & Murphy (1991, p. 64) formulate the following opinion: "Tourism can pass from a beneficial stage of positive psychological, monetary, cultural and environmental change to a net less position for the destination area in terms of economic, social and ecological costs". Leiper (2000) views the tourism destination as being an open and flexible system, which is characterised by a high degree of interaction between the offerers of tourism services, residents, local authorities and tourists. Lynch & Tinsley (2001) define the tourism destination as a system that comprises tourist attractions, namely tourism and related services.

Baggio & Caporarello (2005, p.9) state that "A tourism destination is a complex system composed by many diverse elements whose interactions are highly dynamic and open to external influences". Baggio & Sainaghi (2011) define the tourism destination as a system that comprises several components/reunited parts. Ibanez & Salvador (2015, p. 573) consider that "Tourism destinations are dynamic systems and as such, they need to be managed in order to maintain their competitiveness". Jovicic (2016, p. 5) formulate the following opinion: "As an open system, a tourism destination is subject to influences from various environments (i.e. competitive, economic, ecological, socio-cultural, and political) and therefore those responsible for the development of tourism at destinations need to predict and respond to changes in these environments as best as possible".

### **3.4. Network approach**

Baker (2007) offers an approach according to which the tourism destination comprises quality accommodation services, good restaurants and/or properly arranged public spaces.

Baggio & Cooper (2010) define the tourism destination as being the result of the collaboration between the parties involved in performing tourism activities. Haugland & al. (2011, p. 283) consider that "Tourism destinations represent networks of actors and share many similarities with industrial clusters". Chang & Huang (2014) define the concept as environments in which the experiences lived by tourists are the result/product of the tourism staff, local communities, consumers who create their own experiences, life style or identities.

### **3.5. Smart tourism destination**

Baggio & Del Chiappa (2014) offer an approach that brings in forefront the technological upgrade and digitalization as elements of connection between different organisations, directly or indirectly related to tourism activities. Lopez de Avila (2015) defines the tourism destination as innovating being based on a state-of-art infrastructure guaranteeing the sustainable development of tourism areas and facilitating tourists' interaction and integration, improving the life quality of locals. Buhalis & Amaranggana (2014, 2015) suggest the concept of smart tourism destination that is a result of the interconnection of tourism destinations with the parties involved through platforms, communication systems, respectively decision support systems.

### **3.6. Sustainable tourism destination**

"Sustainable tourism destination is a complex term that has emerged from the need to develop tourism destinations in a sustainable manner, and therefore the need to recognize the efforts to develop destinations accordingly.(Lee, 2001, p.1)

**Table 1:** Different approaches of tourism destination concept

Approach	Authors
Traditional/geographical	Georgulas, 1970; Medlik & Middleton, 1973; Leiper, 1979; Metelka, 1990.
Economic	Lew,1987; Baloglu & McCleary,1999; Buhalis, 2000; Bornhorst, Ritchie & Sheehan, 2009; Hailin Q., Hyunjung Kim & Holly Hyunjung Im, 2011; Ahmad, Jusoh & Hussain, 2012; Kim, 2014.
System	Mitchell & Murphy,1991; Leiper, 2000; Lynch & Tinsley, 2001; Baggio & Caporarello, 2005; Baggio & Sainaghi, 2011; Ibanez & Salvador; 2015
Network	Baker, 2007; Baggio & Cooper, 2010; Haugland & al. 2011; Chang & Huang, 2014.
Smart tourism destination	Baggio & Del Chiappa, 2014; Lopez de Avila, 2015; Buhalis & Amaranggana, 2014.
Sustainable tourism destination	Lee, 2001.

Source: created by authors

#### 4.Limitations and further research

The paper offers a review of the specialised literature, exemplifying different approaches that represent an attempt to briefly capture the main directions formulated in respect to the conceptualisation of the tourism destination. Furthermore, there is also the possibility of overlooking some points of view that might be considered as relevant among the field professionals. In relation to the formulation of future working hypotheses, it would be appropriate to study the factors that determine the choice of tourists when choosing a tourism destination taking into account current pandemic conditions.

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## **CORRUPTION - THE MAIN COMPONENT OF ECONOMIC AND FINANCIAL CRIME**

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**Abstract:** *Corruption seen as a central element of the phenomenon called economic and financial crime is likely to seriously distort the health of the economic environment in a state, altering democratic governance and the rule of law, in fact a real threat to economic development on the principles of market economy. In the following we will refer to theoretical approaches of the literature on the phenomenon of corruption, revealing a possible form of quantification, respectively how it affects the economic environment and the social implications associated with the manifestations of this phenomenon. We aim to perform a theoretical analysis of the term corruption, and then develop the study with the analysis of real implications in society. The research in question is intended to be a basis for understanding the phenomenon in correlation with the complexity of social implications, in order to subsequently propose concrete solutions to combat it, aiming to limit it and its adverse effects on the economy and society. The use of the methodology for investigating the specialized literature, followed by the analysis and synthesis of data allowed us to identify the main implications of corruption in the economic and social ecosystem of the state.*

**Keywords:** corruption; underground economy; tax evasion

**JEL classification:** D73; H26; E26; K42

### **1. Introduction**

Appreciated as one of the worst phenomena with major implications on economic systems, corruption is the result of increasing the degree of interconnection of national economies, of various economic sectors within a state in the context of specific institutional-administrative conditions.

In Europe there is a more consistent presence of the phenomenon in former communist countries, which seems to have difficulties in building and functioning of democratic institutions, in increasing the education and training of the population, and in determining appropriate behaviors. The inconsistency of the legal framework in these countries, amid political and social instability, is a favorable condition for the spread of corruption at all levels.

In fact, corruption significantly undermines democratic governance and the rule of law, an impediment with a negative impact on investment growth and economic growth (Mauro, 1995). We think that corruption highly characterize low-income countries. The higher levels of corruption are correlated with low levels of economic and sustainable development.

## **2. Defining and quantifying corruption**

According to the World Bank's definition, also highlighted by Achim and Borlea (2019), "corruption is the illegal use of public resources for personal gain", while Transparency International (2019) defines corruption as "the abuse of power entrusted to obtain private benefits".

Attempting to quantify corruption, as well as the underground economy, is an approach with an extremely high degree of relativity, practice showing that both the phenomenon of corruption and the concept of underground economy can not be inscribed in any strict pattern in terms of mathematically, in the absence of relevant statistical bases. Corruption is not representative of the entire underground economy because the concept of underground economy in a broad sense also includes segments such as self-consumption or criminal type (drug trafficking, arms trafficking etc).

Because it is a difficult phenomenon to quantify, the literature has tried several ways to approach / classify corruption. As indicated by Achim and Borlea (2019), in terms of the severity of corruption, it can be classified as small, large or medium.

Data from Transparency International (2019), in the report "Global Barometer on Corruption", show that about 25% of the world's population said they were in a position to pay bribes to access public services.

The calculation of corruption level has been in the attention of Transparency International since 1995, when the Corruption Perceptions Index (CPI) was launched, which is based on corruption data from specialized surveys conducted by several independent institutions. Surveys used to draw up the CPI raise questions about the misuse of the civil service for personal gain, focusing, for example, on bribery by public procurement officials and embezzlement of public funds, thus leading to administrative corruption.

The literature has tried various forms of defining corruption in order to create a framework as realistic as possible for a quantification closer to the perception of the phenomenon in reality. In this sense, we highlight the approaches of Klitgaard (1999), who proposes the following formula:  $C = M + Dp - R$ , where C is corruption, M is the monopoly position, Dp is discretionary power, and R is responsibility. Corruption can occur where there is a cumulative monopoly situation, a discretionary power is exercised regarding the distribution or provision of the monopoly, respectively there is no regulated liability regarding the distribution made.

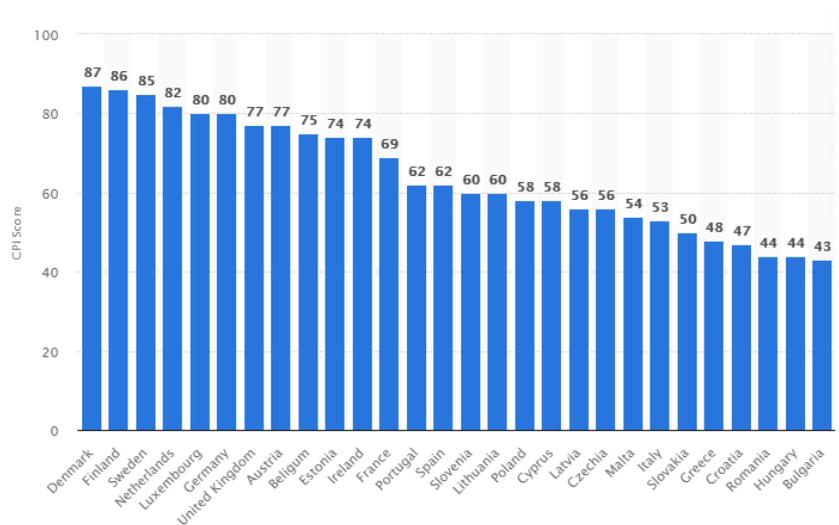
## **3. Implications of corruption on the economic and social axis**

The complex forms of manifestation of corruption affect in a different way the democratic governance, respectively the market economy, with implications among the most diverse felt by both the economic and the social sphere.

Various studies mentioned by Achim and Borlea (2019) highlight the negative impact of corruption on fiscal policies. Relevant is the analysis of Kaufman (2010) who established a direct relationship between corruption and fiscal deficits, highlighting that this phenomenon reduces tax revenues, increases public spending, affects competitiveness and economic growth.

On the other hand, the literature Gupta et al (2002) and the European Parliament (2015) highlight a direct relationship between the level of corruption and social inequality, respectively poverty. Countries with a high level of corruption have lower

literacy rates and higher mortality rates due to poor health services with privileged access for different sections of the population.



**Figure1:** Corruption perception index score of countries in the E.U. 2019  
Source: Statista 2020

The statistic of [Clark \(2020\)](#) shows the corruption perception index score of countries in the European Union, as of 2019. The index itself is a composite indicator that includes data on the perception of corruption in areas such as bribery of public officials, kickbacks in public procurement, embezzlement of state funds, and effectiveness of governments' anti-corruption efforts. The highest possible score in perception of corruption is 0, whereas a score of 100 indicates that no corruption is perceived in the respective country. The nordic countries in the EU have highest corruption perception index score, while Romania has almost the lowest index score of all EU countries with a score of 44.

The complexity of corruption is highlighted in some studies that propose an approach from another perspective, namely its ability to contribute to economic development through the possibility of shortening bureaucratic flows. As the study developed by Hoinaru et al (2020) shows, corruption can also have the role of "lubricant" of economic mechanisms, in addition to the obvious "defeat" of them, with an indirect contribution to economic growth.

#### 4. Conclusions, limits and research directions

The study of corruption cannot be limited only from the perspective of the present analysis. Certain favorable factors contribute decisively to the development of the diversity of forms of corruption: the high degree of concentration of political and administrative power, the fragile democratic system; strong bureaucratic system, low standard of living, etc., which may be the subject of future research.

The inventory of the consequences of this phenomenon is an exhaustive process, also surprised by the studies carried out by Mauro (1997) and Gray et Kaufmann

(1998), among the most relevant consequences being mentioned: the decrease of the efficiency of the use of production factors; the depreciation of the competitive environment, the depreciation of the quality of public services and the decrease of the investment level. Of course, further studies in this segment may lead to further conclusions.

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## QUALITATIVE MODELING OF A CYBERNETIC SYSTEM

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**Abstract:** *The purpose of this article is to synthesize and concretize both research and studies, appeared in the field of cybernetics, modeling a system, based on the development of models with utility in various fields, such as economic processes, biology, physics and so on. The main goal is to create such a system using mathematical modeling in accordance with the feedback contained in cellular automata, but also in algebraic fractals. These two notions are essential in the development of technical solutions of web applications, used in fields related to quantum mechanics. I would also like to mention that the foundations of the study were from articles written by Professor Dr. Florian Colceag.*

**Keywords:** feedback, modeling, cybernetic system, information space, algebraic fractals.

### 1. Introduction

The starting point of this paper is to find a variant of qualitative modeling of a cybernetic system, based on the fractals used in generating feedback. This cybernetic system is practically a feedback loop and is based on a mathematical procedure that includes the theory of cellular automata, being able to offer technical solutions in the development of IT, economic, biological, etc. applications. Scientists have demonstrated the existence of the theory of cellular automata with the development of computers.

The idea of the theory of automata was introduced by John von Neumann in 1948, being present for a conference at the Hixon Symposium, specifying that it is not a theory, but rather "an imperfect articulated and difficult to formalize", (introduction in "Computer and the brain", Written around 1955-1956 and published after his death (von Neumann, 1958)). Also, there remain interesting points of view that lead from discrete to continuous, based on implicit mathematics, including logics and probabilities.

A cellular automat, viewed from an informational perspective, is an abstract object that contains two intrinsically linked components, namely: the first component, viewed as a utility, being represented by the architecture, the universe or a spatial structure of the cellular automaton, and the second component is practically represented by a finite automaton, a copy of which will be found at each node of the network. (Delorme, 1999).

From the research done by Colceag (2001), the theory of cellular automata claims that the universe is an information and that every structure in the universe is composed of a mini-computer, and these mini-computers induce a universe of information.

He also claims that information has the following characteristics:

- It is considered a computerized unit, capable of connecting information in a predictable way.
- It is a complexity in essence, which can reveal different behaviors in a different situation.
- It can connect to other information contained in cellular machines.
- It is able to develop in different stages of complexity.
- It is universal and can characterize any phenomenon (including life).

This property of universality can provide another type of mathematical approach, being able to detect informational connections in different types of structures. This new mathematical approach could be used in complex systems in different fields, such as living structures, economic processes, physics (Colceag, 2001, Modeling and Models).

To understand how a complex system works, viewed from different perspectives and at different levels of design, a different approach is needed. This approach will be done using structural algebraic properties of space in which different levels of complexity can be created on the same feedback generation system. (Colceag, 2004, Universal Language).

## 2. State of the Art

According to the initiator of cybernetics, Norbert Wiener (2019), feedback is an intelligent behavior that can be simulated by machines (robots), but not only, being applicable in various sciences such as engineering, computer science, systems control, neuroscience and many other fields.

Hlaváč (2019) states that the functions that describe the feedback cycles are connected with vectors, in a circuit, the structures being connected at the vertices. By applying the vectors characterized by the functions of the structure, a modeling of the functioning of the structure will be obtained. This type of modeling characterizes the function of a global structure, from the same level of perception, but also from the same perspective.

The decomposition of the stages of the feedback cycles creates a model of informational interconnection, because it creates a perspective of a universal projective space. Basically, this design space is universally used, because the relationships between different objects are universal, and this mathematical perspective describes a basic dialogue for the development of algebraic fractals (Colceag, 2001, Modeling and Models).

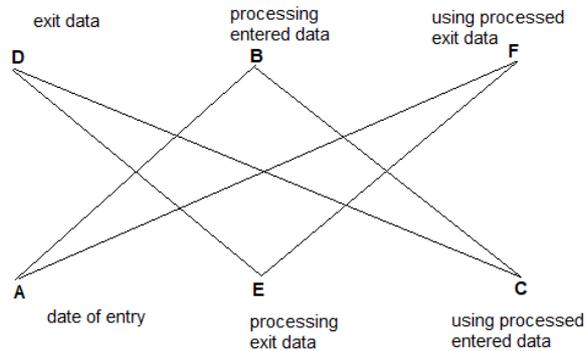
Research by neurologists uses projective space to describe neural networks. This type of modeling provides a good description corresponding to high-precision experimental data. The type of fractals used studied in this paper could correspond to a real situation that describes a macro-structure, resulting from neural structures modeled in projective spaces (Colceag, 2001, Modeling and Models).

There is thus a group of automorphisms of projective space, consisting of a set of equations:

- $F1(x) = x;$
- $F2(x) = 1-x;$
- $F3(x) = 1/x;$
- $F4(x) = 1-1/x;$
- $F5(x) = 1/1-x;$
- $F6(x) = x/x-1$

A feedback loop can result from this group of equations (Colceag, 2001, Modeling and Models).

Grundhöfer and Stroppel, argue in their research that large groups of automorphisms, in the study of geometry, it is often desirable to limit the action of the group to a certain subgeometry (1991, pp. 319-327).



**Figure 1:** Feedback cycle

Source: Colceag, 2003, Information Fields, Structural Fractals

Colceag (2003) demonstrates that based on the set of equations above, there is an example in which two parallel mirrors will reflect an image to infinity, and the reflections created by them are feedback cycles that will be transformed into new feedback cycles, but this time of higher order, being isomorphic with the first subgroup of equations (F2, F3, F6). Thanks to this model, we are subjected to a lesson, namely: a small amount of information can change the balance of information by creating information storms (catastrophe theory). It also gives us an insight into what mobile phones will really mean, given the structure of the dialogues that form feedback cycles.

From Colceag's (2001, 2003) model of feedback cycles and cellular automata formed by such cycles, it appears that the planetary ecosystem has its own intelligence and that these relationships can be described today using computer programs and algebraic fractal theory that describe behavioral feedback cycles.

Nomura (2011, p. 63) argues in his research that the entire universe is "a quantum state defined on its cones of light from the past bordered by apparent horizons". based on practical quantum mechanics, which plays a key role in regulating infinity. In this case the predictions do not depend on how space-time is parameterized, as it should be if we were based on the theory of quantum gravity.

### 3. Conclusions

In conclusion, the main objective of this research is to create a cyber system for which there is a need to create an information space, based on notions of mathematical modeling, fractalization levels and feedback, for certain processes (economic, IT, etc.). Basically, I started working on this model, using modeling software, and the main point of completion, I want it to be a general system, which can be used in several fields.

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## EFFECTS OF THE COVID-19 PANDEMIC CRISIS ON THE BRAND IN TOURISM

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**Abstract:** *The coronavirus pandemic (COVID-19) that has spread around the globe over the course of several months has not only had a significant impact on public health, but has also affected one of the pillars of the global economy - the tourism industry. The recovery of tourism in times of crisis requires actions to improve activities by interrupting actions of socio-economic impact. Innovation, in this way, has a stabilizing role. There is a need for strategic recovery planning that takes into account the needs of citizens, in which the economy must accelerate and return to a path of sustainable growth, integrating the double, green and digital transition and drawing all the lessons from the current crisis.*

**Keywords:** brand, crisis, tourism, pandemic, coronavirus, risks.

**JEL classification:** Q01, Z30, Z32.

### **1. Introduction: The effects of the pandemic on the world economy**

COVID-19, the official name of coronavirus disease 2019, is caused by the SARS-CoV-2 coronavirus, which had not been previously identified in humans. More than 40 million cases have been confirmed, and the disease has now claimed more than a million lives worldwide.

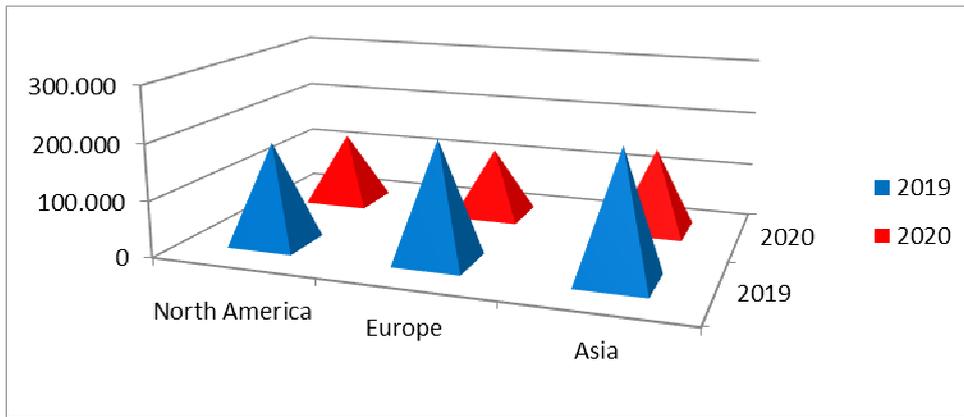
Countries have relaxed blocking restrictions, but are urged to continue large-scale testing. The pandemic put health systems under severe pressure and there were shortages of critical supplies. Pharmaceutical companies and research teams around the world are fighting to develop a safe and effective vaccine.

The spread of COVID-19 has severely affected the world economy. These are uncertain times for financial markets, with countries around the world suffering the severe effects that have led to their destabilization as a result of the pandemic. No company is immune to challenges and expects the repercussions of the health crisis to be felt for many months to come.

Due to the fact that many countries have introduced travel restrictions to counter the spread of the virus, travel around the world has stopped almost completely since April 2020.

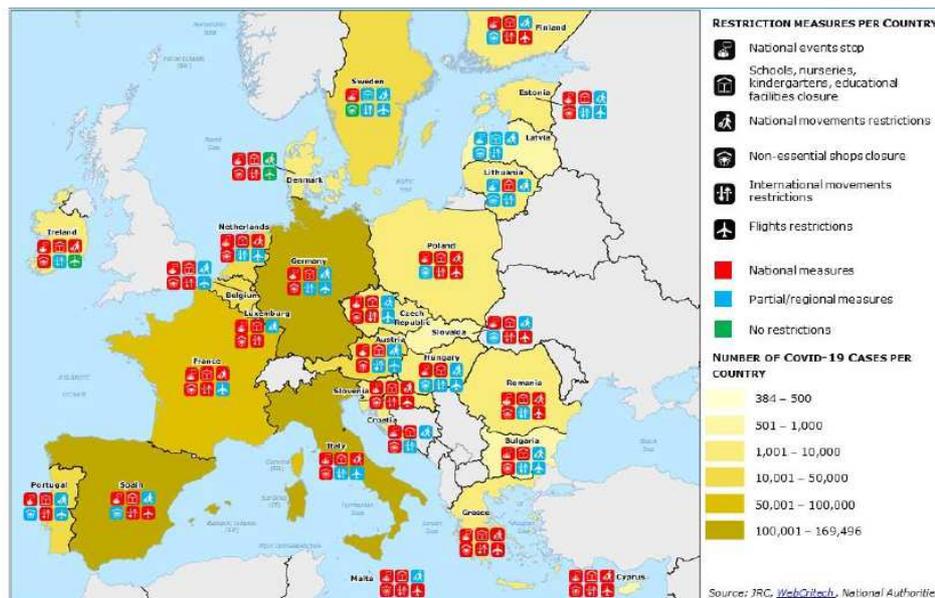
While airlines are suffering an unprecedented decline in passenger numbers, other branches of the tourism industry are facing similar failures, from declines in the food and beverage industry to declining guest numbers in the accommodation industry.

According to the mobility market prospects on COVID-19, revenues from the tourism industry in Europe will be the most affected by the pandemic, falling from 211.97 billion US dollars in 2019 to about 124 billion US dollars in 2020.



**Figure 1:** Projected change in revenues from the tourism industry due to the coronavirus pandemic (COVID-19) worldwide from 2019 to 2020, by region  
 Source: <https://www.statista.com/>

Countries are struggling with the dangerous virus, and societies and industries are now looking to rebuild and recover from the crisis. The recovery process for the travel industry is complicated and time consuming. EU Member States have banned public meetings, closed (in whole or in part) schools and introduced border / travel restrictions. More than half of the EU Member States have declared a state of emergency.



**Figure 2:** COVID-19 restrictions in the European Union, April 2020.  
 Source: <https://www.consilium.europa.eu/ro/policies/coronavirus/covid-19-travel-and-transport/>

## 2. COVID-19, challenges and perspectives

COVID-19 has led to drastic changes in our lives. It is a new normal that requires the adaptation of existing strategies or the adoption of new ones. The same goes for products and services. Innovative companies demonstrate agile mindsets and pivot towards new strategies and areas, while remaining with their main goal.

The serious consequences and challenges of COVID-19 have stimulated innovation in all industries, leading to new niche markets and opportunities to make an impact, help others and build business.

Using existing resources for a different purpose - often through unconventional partnerships - is another smart tactic used by innovators during COVID. One option is to use a physical space in a new way.

Diversification of lifestyles and cultural models, creation, imposition and acceptance of new rules means the birth of social innovation as a system of transformers of collective activity (Stanciu, Hapenciuc et al., 2008).

Despite the negative effects of the Covid-19 pandemic crisis, the International Advertising Association, Romania's subsidiary (IAA), in a press release issued during April 2020, expressed confidence in brands, communication and consumers.

The most effective way to ensure long-term brand growth is to maintain advertising budgets. This argument supported by the International Advertising Association comes in the conditions in which the advertisements have been drastically reduced, the percentages varying between 50% and 80%, decrease caused by the onset of the state of emergency due to the coronavirus pandemic.

In this difficult period, in Romania, people trust the brands that give them safety, transparency and balance in conditions of uncertainty in which an entire value system is put to the test.

According to the International Advertising Association (IAA), the situation is similar to that during the financial crisis of 2008, when the brands that continued to invest in advertising were the ones that recovered the fastest and easiest.

The biggest brands can be affected if their popularization is suspended or delayed and this, in favor of small brands. According to the International Advertising Association study, 60% of brands that suspend their advertising, record significant losses of at least one of the main metrics of relationship: popularity, affinity, leadership, differentiation or price.



**Figure 3:** Brand relationship metrics

Therefore, maintaining a balanced budget for advertising can ensure the health of the brand. According to Kantar C19 Monitor - Romania, in a study conducted March 18-19, 2020, 94% of the interviewed population does not recommend even in times of crisis to stop advertising campaigns in the field of branding, and 79% of respondents believe that the current pandemic crisis de Covid-19 will make a strong mark on all sides of the economy.

### 3. Conclusion

In terms of management, two main categories of crisis-related tourism can be distinguished (Rossart, 1992):

- the crisis caused by events beyond the control of a vision of the management segment. Included in this category may be: natural disasters, wars, terrorist activities, changes in political regimes, crime waves, epidemic etc.

- crisis management resulting in the failure or lack of measures to prevent foreseeable risks. Included in this category are: inadequate strategic management, financial fraud, data loss / theft, uninspired investments, production blockage etc.

We need security not only medical .... Covid also triggered the lack of confidence, fear, confusion globally ... All these states urgently need to be combated with "tangible" strategies, coherent, realistic, taking into account the need for people to get out of a prolonged lockdown as quickly as possible. Or tourism needs space, a safe environment, healthy tourists.

The year 2021 for world tourism is marked by uncertainty ...

The brand, the image of a destination suffers from the same thing. Together the tourism and the country or local brand can regain trust through campaigns to popularize the conditions offered at the destination, meant to offer them a protective climate, apart from any virus, pandemics or natural disasters.

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## MARKETING CHALLENGES IN THE INTERNET OF THINGS ERA. THE IMPACT OF THE NEW TYPES OF BUSINESS MODELS

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**Abstract:** *The present paper aims to highlight the way in which the new business models generated by the Internet of Things phenomenon are presented in the literature, especially when faced with marketing challenges. The literature reveals deep disruptions in the marketing field, the consequence of use of the disruptive technologies Internet of Things. These marketing disruptions are felt both in marketing strategies elaboration, in communication and relationships domain, but also in aspects related to the monetization of the value created. Also, we consider that, by involving other disruptive technologies, such as Artificial Intelligence, Machine Learning and Blockchain, the phenomenon of the Internet of Things changed the communication and cooperation between people and their smart devices. This affected people, institutions and even society overall, in all areas.*

**Keywords:** marketing; internet of things; business models.

**JEL classification:** M31; M21; O32

### 1. Introduction

A revolution is happening via the Internet of Things (IoT) – one that will have a tremendous impact on the world as we know it.

The Internet of Things (IoT) brings together in an interconnected network: people and smart devices with a unique identification, able to interact (even without the intervention of a human operator), and to cooperate, in order to achieve common goals. Thus, are formed dynamic ecosystems, in which value can be created in ways never seen before. Most often, there is co-creation of value with relevance in the area of services, which is based on new business models.

The IoT occupies the focal point of several distinct phenomena, including digitization, service-orientation, and value co-creation.

The present paper aims to highlight the way in which the new business models generated by the Internet of Things phenomenon are presented in the literature, especially when faced with marketing challenges. The literature reveals deep disruptions in the marketing field, the consequence of use of the disruptive technologies Internet of Things. These marketing disruptions are felt both in marketing strategies elaboration, in communication and relationships domain, but also in aspects related to the monetization of the value created.

In the following section, we'll analyze the Internet of Things literature from the marketing perspective, with reference to aspects related to the new types of

business models, marketing relationships, and marketing communication. The last section will be dedicated to conclusions.

## **2. Literature review**

### **2.1. Internet of Things and the service-dominant logic paradigm in marketing**

In their paper "Vignettes in the two-step arrival of the internet of things and its reshaping of marketing management's service-dominant logic", Woodside and Sood offer vignettes on the introductions of the IoT and present their impacts on revising the service-dominant logic paradigm in marketing. Woodside and Sood specified that the ability of embedding sensors into objects allows for predictive maintenance and real-time monitoring of things resulting in the adoption of new business models for monetization of the service and subsidization of the hardware. They noted that because the benefits of IoT applications really are enormous and the technical advances in smart devices are now rapidly improving, in their vision the IoT revolution will hit hard in all areas of daily life before 2025, similar to the great impacts occurring in business-to-business applications.

### **2.2. New types of IIoT-enabled business models**

Unlocking value from machines: business models and the industrial internet of things', is the paper research by which Ehret and Wirtz, argues that the Industrial Internet of Things (IIoT) offers new opportunities and harbours threats that companies are not able to address with existing business models. Non-ownership contracts are introduced by the authors as the basis for business model design and are proposed as an architecture for the productive sharing of uncertainties in IIoT manufacturing networks, for transforming these uncertainties into business opportunities. Ehret and Wirtz identify the following three main types of IIoT-enabled business models: (1) provision of manufacturing assets, maintenance, and repair, and their operation, (2) innovative information and analytical services that help manufacturing (e.g., based on Artificial Intelligence, Big Data and analytics), and (3) new services targeted at end-users (e.g., offering efficient customization by integrating end-users into the manufacturing and supply chain ecosystem).

### **2.3. The core building blocks of business model development in IoT - driven ecosystems**

Dijkman and his research team (2015) through their research "Business models for the Internet of Things" noted the core building blocks of business model development in IoT-driven ecosystems as being: value proposition (the source of opportunities that contribute to the revenue streams), value co-creation (all monetary and non-monetary benefits), and value network (relationship with key partners, customers, and all remaining stakeholders).

### **2.4. The firm's dynamic capabilities**

At certain critical uncertainty times, the ability of the top management team to sense a key development or trend, and then delineate a response and lead the firm in its path forward, is critical to the firm's dynamic capabilities. Also, the organization's values, culture, and collective ability to quickly implement a new business model or other required changes are also important dynamic capabilities. Management must lead the organization for sensing, seizing, and transforming, and decide the right strategy suitable for the firm's capacity to be agile. (Teece at

al., 2016). By viewing agility within the dynamic capabilities framework, Teece (2018) specified that "agility should be sought only in harmony with the requirements of the business environment and with the firm's strategy."

### **2.5. New requirements and opportunities for marketing**

Regarding the impact of the Internet of Things on marketing, Michael Porter and James Heppelmann (2014) affirmed "smart, connected products allow companies to form new kinds of relationships with customers, requiring new marketing practices and skillsets. As companies accumulate and analyze product usage data, they gain new insights into how products create value for customers, allowing better positioning of offerings and more effective communication of product value to customers." The authors shone a light on how smart, connected products affect competitive capabilities. They highlighted the enormous potential of industry incumbents to strengthen their positions by expanding their presence in the value chain with product-service hybrid offerings in the form of complex solutions. Thus, they sustained a new type of business model based on selling solutions rather than products. The authors suggest that digitization is a means to erect higher barriers to entry for newcomers to the market as incumbents can form more intimate service-oriented relationships with customers. Therefore, they sustained that selling IoT solutions open up important new requirements and opportunities for marketing and sales. "Sales and marketing teams will need broader knowledge to position their offerings as components of larger smart, connected systems. Partnerships will often be necessary to fill product gaps or connect products to leading platforms. Salespeople will need to be trained to sell with those partners, and incentives will need to accommodate more-complex revenue-sharing models" have affirmed Porter and Heppelmann.

### **3. Conclusions**

In conclusion, the IoT is a subject of increased interest and enthusiasm. Connected devices and products offer new possibilities for everything from preemptive maintenance to new service and business models. By integrating the IoT in organizations, the stream of real-time data obtained, enabled by identifying, sensing, communicating and computing the capabilities of IoT devices is another way to add value for businesses. The transformation of data into information, data as a service, is a critical research agenda.

Combining IoT aspects and marketing skills - suitable forms of communication, coordination, and trust consolidation between parties- can help generate new market opportunities and offer a ground to build up competitive advantages – to increase customer satisfaction, confers positive image. In order to prepare for what is coming, managers need to consider their digital strategy in relation to their own business and the ecosystem of partners, as well as emerging technology.

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## QUALITY MANAGEMENT AND E-COMMERCE

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**Abstract:** *E-commerce is the form of shopping in electronic media and there is the concept of customer in electronic commerce. Companies, institutions work to respond to the requests of their customers. The fact that Quality Management is a management philosophy aiming at customer satisfaction shows that it can be applied in electronic commerce activities.*

*In the first part of the study, the definition and development of Quality Management is examined. In the application phase, the solution methods created against the problems are explained. Second part, e-commerce issue has been discussed and electronic commerce has been examined. In the third chapter, the application areas of E-Commerce and Quality Management principles are examined and how they are and should be used in e-commerce are explained. In the last section, some data are provided on the e-commerce company in Turkey. Customer-oriented working situations are analyzed together with the Quality Management elements.*

**Keywords:** E-commerce, quality management, customer satisfaction.

**JEL Classification:** M10; L15

### 1. Introduction

When the term quality is used, it is generally considered an excellent product or service term that meets or exceeds the expectations of individuals. These expectations are based on the intended use and selling prices. It is this level of quality that comes to mind when a product exceeds consumers' expectations. Hence, quality is a kind of intangible concept based on perception (Xiang 2007, p. 10). However, although it is based on perception, in the development process of the concept of quality, some elements that make up this perception have also been determined. There are more than one factor that determines the quality of a product or service. Quality Management can be defined as a management approach based on certain reinforcing principles, as well as related practices and craftsmanship techniques. Quality Assurance is based on the principles that focus on collaboration and learning, process management, continuous improvement and increasing employee satisfaction as well as customer satisfaction (Assarlind and Gremyr, 2014).

### 2. Quality Management in e-commerce

E-commerce applications are used in businesses either as a stand-alone trading method or to support existing businesses. In both cases, total quality management practices can contribute positively to electronic commerce activities. E-Commerce

principles; Being customer oriented, Continuous improvement, Management with processes, full participation. If a web-based business is in progress, the content of the website should be satisfactory for the customer base. Products should be grouped and the customer should be given the opportunity to compare between products in the same category. Its technology should be sufficient for online transactions. If sales are made through the website, the site should be easy to use, simple and fast. The purchasing process should be completed in very simple steps, and the product or service information sold should be at the maximum level. There must be a membership system on the website. Long membership forms should not be used to obtain customer information. Support services should keep customers satisfied. Customers must find quick solutions to the problems they encounter. Quality Management in e-commerce, should be able to follow all the steps from the moment the customer orders to the delivery of the product through communication channels. A customer-oriented management approach is one of the main quality management elements in e-commerce. Being customer focused starts with knowing the customer and finds the way to satisfy them. In this respect; Knowing who the customer is and understanding their needs, knowing and predicting purchasing attitudes and behaviors are the first elements to be done. An electronic commerce application is expected to have the following characteristics to be of high quality: ( Nemli E, 2010)

- If there is a web-based business, the content of the website should be satisfactory for the customer base. Products should be grouped and the customer should be given the opportunity to compare between products in the same category.
- Its technology should be sufficient for online transactions. If sales are made through the website, the site should be easy to use, simple and fast. The purchasing process should be completed in very simple steps, and the product or service information sold should be at the maximum level.
- Support services should keep customers satisfied. Customers must find quick solutions to the problems they encounter. Adequate information should be given to customers describing how to contact the electronic commerce company. Operational methods must be safe. It is a sign of the reliability of the site that personal information is encrypted and kept in the database and has security certificates that ensure security during data transfer.
- Customer requests and expectations should be kept at the forefront and should be customer-oriented.

### **3. Purpose, Model and Findings of the Research**

#### **3.1 Purpose of the research**

The aim of the research is to measure the knowledge of e-commerce companies in Turkey about quality management and to examine their compliance with quality management principles.

#### **3.2 Research Model and Sampling**

The model of the research was determined as the descriptive model, which is one of the qualitative research models. The e-commerce websites were chosen as the

sample of the research and the data about these companies were used. Location, products, etc. for selected companies. such distinctions are not made.

### **3.3 Findings and Data of the Firm in Research**

The use of SSL, which provides security while transferring data on the Internet, is an important concept for E-Commerce companies. The companies participating in the research were asked whether they have an SSL certificate or not. It has been observed that 84.4% of the companies have SSL certificates and 15.6% do not. All companies that have SSL certificates are a 128 bit or higher certificate (Deloitte D., 2019). Accordingly, 19.4% of the companies are B2B (inter-enterprise), 93.5% B2C, 11.3% C2C. E-Commerce companies participating in the study were asked about their payment methods and the answers were given as follows. The applications of the companies participating in the study of international quality systems such as ISO-9000 Quality Management Standard, ISO-1799 Information Security Management System were examined. 11.8% of the companies stated that they apply the standards, 30.6% of them do not apply the standards, 57.6% of them do not, but they think to work for this. (Opus., 2019) In addition, all companies that state that they implement Quality Management Systems apply ISO-9000 Quality Management Standard. One of the effects of Quality Management on companies is that they start to work with the principle of continuous improvement. The companies participating in the research were asked whether they have any work to raise awareness and training on information security for their customers. 72.3% of the companies answered this question as "No" and 27.7% as "Yes". When looking at the quality management regarding the requests and expectations of the customers, it was stated that 82.4% of the companies received via email and phone calls, 56.4% with the Customer request / suggestion forms, and 22.7% with the Customer satisfaction questionnaires. The different calculation of these proportions is due to multiple choice questions (Opus, 2019).

### **4. Conclusion**

In every period, there have been different concepts that triggered change and directed companies. The concept that influenced the economy in the 80s is quality. Quality management went to restructuring in the 90's. In the 2000s, the most important target for companies that have adopted the understanding of quality management and completed their restructuring has been speed. The rapidly evolving technology has created a diverse customer portfolio, and this customer portfolio has made the commercial market open to constant changes. With the technology meeting this need for rapid change and being used intensively, Electronic Commerce methods have become effective trading tools.

Electronic Commerce enterprises in Turkey are generally composed of small enterprises and a turnover of no more. In particular, the development of the software industry and the increase in affordable and practical e-commerce software make companies easy to do e-commerce. For this reason, our research has emerged, as can be seen in the data, of many small electronic commerce companies. the target audience of the e-commerce company in Turkey that consumers are the ultimate end user. The B2C (Business to Consumer) study of 93.5% of companies engaged in e-commerce shows this. In addition, it is understood from the fact that the companies working in wholesale realize this and

make retail sales both by wholesale and internet, and from the work of all companies that work B2B (business to business). The high sales to the end users also shape the payment methods of the companies. As can be seen in the findings of our study, credit card, money order and EFT are mostly used as payment methods. In addition, a striking point is that the payment method is also used for product delivery. This may be because, as in conventional trading methods, the customer is insecure because he does not know and does not see the person / company from whom he / she purchases the product or service. However, the fact that the credit card has a usage rate of 92% shows that this insecurity is gradually eliminated. In addition, almost all of the companies warn their members not to share their membership information with others, and contribute to creating an awareness in safe shopping. Quality Management requires process-based work. It is observed that this issue is given good importance in e-commerce companies. Accordingly, three quarters of the companies determined their processes and owners of these processes and manage their processes with a performance-based system. In our study, quality management and its benefits are explained. The status of e-commerce companies is revealed. It is obvious that quality management is an indispensable concept for e-commerce companies. However, it is seen that approximately one third of e-commerce companies are not aware of this concept. The nice and hopeful thing is that the other two-thirds have knowledge of this subject and are even applying or considering applying international quality standards such as ISO 9000. This situation may be an indication that the customer satisfaction will be brought to the forefront and the sector will develop further and this development will be accelerated. In addition, the picture that emerged in our research is that quality management can lead e-commerce companies to change in a beneficial way. Because about 78% of companies that have information about quality management are also knowledgeable about quality management, about half have a call center, 61% have a suggestion system that will ensure the participation of employees, about 72% have determined their business processes. In a performance-based management approach, 58% of them conduct customer relations management studies and provide planned trainings on various subjects, 84% use SSL for security, and warn their customers about security issues. E-commerce concept is a new concept in our country. In our opinion, customer awareness will be established in line with the fact that e-commerce companies also attach the necessary importance to total quality in their applications and companies will be able to focus on the customer.

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# THE CAPACITY OF PUBLIC AUTHORITIES TO FINANCE PUBLIC INVESTMENTS IN A SUSTAINABLE WAY

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**Abstract:** *The main limitations identified in the analysis of the international literature is represented by underinvestment (Canada), increasing the capacity of public authorities through the merger of municipalities (Italy) and the allocation of subsidies at the central level for municipalities with lower revenues (Japan). The main limits in ensuring the financing of public investments in Romania are represented by the lack of financial resources for making investments as well as by the low administrative capacity. First of all, the lack of financial resources necessary to make investments can be achieved by 4 methods: increasing public revenues, reducing public spending, obtaining non-reimbursable funds (especially structural and investment funds provided by the European Union) and borrowing. This analysis presents aspects at local, national and European level. The efficiency of using public funds is another method by which investment allocations can be increased. Establishing performance criteria for the allocation of public funds is important and these criteria can be established through the law.*

**Keywords:** *sustainability, public investments, public debt, budget, development*

**JEL classification:** *H72; H83; Q56; R53*

## **1. Introduction**

The objective of this paper is represented by the analysis of the capacity of public authorities to finance the realization of public investments. This analysis presents aspects at local, national and European level. The main limitations identified in the analysis of the international literature is represented by underinvestment (Canada), increasing the capacity of public authorities through the merger of municipalities (Italy) and the allocation of subsidies at the central level for municipalities with lower revenues (Japan). The main limits in ensuring the financing of public investments in Romania are represented by the lack of financial resources for making investments as well as by the low administrative capacity.

## **2. Literature review**

In this section I will present the main conclusions of the researchers regarding the public infrastructure, the importance of public investments and the sustainability of public finances.

Conger Brian and Tassonyi Almos (2015) present the importance of public investment expenditures for infrastructure in Canada (Ontario and Alberta). Thus, the authors identify the limit on the underinvestment of these two provinces as well

as the reduced fiscal capacity. In this paper, solutions will be proposed for increasing the investment capacities of public authorities.

Mussari Riccardo and Ruggiero Pasquale (2017) mention that the merger of municipalities leads to an increase in administrative capacity. An important element of the increase of the administrative capacity is represented by the increase of the public investments. In my opinion, the merging of municipalities and communes is essential for increasing the resources available for making investments and for providing high quality public services.

Shun-ichiro Bessho (2016) presents a case study on local and central financial allocation in Japan. Thus, a limit identified by the author is represented by the fact that an increase in revenues from own sources leads to a decrease in subsidies received from the central level. From my point of view this aspect is negative because it does not encourage financial performance and efficiency at the level of local public authorities. One proposal would be to increase local revenues and allocations at the central level so that local authorities are motivated to increase revenues from their own sources.

### **3. The capacity of the local public authorities in Romania to ensure the financing of public investments**

The main limits in ensuring the financing of public investments in Romania are represented by the lack of financial resources for making investments as well as by the low administrative capacity.

First of all, the lack of financial resources necessary to make investments can be achieved by 4 methods: increasing public revenues, reducing public spending, obtaining non-reimbursable funds (especially structural and investment funds provided by the European Union) and borrowing.

The increase of public revenues for a local public authority can be achieved through the increase of local taxes applied to real estate and means of transport as well as by increasing the number of jobs, increasing wages and increasing consumption in that locality (increasing the amount of money redistributed from government level).

The reduction of public expenditures can be achieved through the reduction of operating expenses, the reduction of salary expenses, the reduction of waste of public money so that more money remains for investments, so that economic growth is ensured.

Law 273 of 2006 on local public finances from Romania (Article 63, paragraph 4) provides that the local public authorities in Romania may contract loans up to 30% of their own income, consisting of taxes, fees, contributions, other payments, other income and quotas from government.

Another method for increasing investments is to access non-reimbursable funds. In Romania, the local authorities that took advantage of the European funds managed to develop and overcome certain gaps compared to other cities (for example Oradea or Cluj - Napoca).

The efficiency of using public funds is another method by which investment allocations can be increased. Establishing performance criteria for the allocation of public funds is important and these criteria can be established through the law. An example of poor allocation of public resources in Romania was the construction of Sports Halls in villages without many children, the rehabilitation of kindergartens in

villages with very few children or the rehabilitation of roads in sparsely populated localities without growth potential through tourism, services or industry. It should be mentioned that the excessive fragmentation of the local public administration in Romania has a negative effect through the fact that each mayor's office must have employees and each municipality has public funds that can be allocated inefficiently. One solution is to merge the villages, which would lead to a reduction in expenses. At the same time, in large cities could be created merged companies to provide public services and support departments (economic, human resources, investment, administrative) would be common to a single company and thus would reduce spending on services and could be increased financial allocations for investments leading to development. In Oradea we can talk about a public service holding company that combines the companies that offer public transport services, distribution and production of thermal energy, the company that offers drinking water supply and sewerage and the company that manages the public domain in Oradea.

In order to stimulate the efficiency and increase the allocation for investments within the local public administration, a financial model could be imposed that would impose certain conditions for the financial allocation from the central level to the local public administration.

This model of financial allocation would imply that the maximum number of employees of the municipality should be based on the revenues obtained from the local budget and not according to the number of inhabitants. Thus, the mayors would be stimulated to increase the revenues to the local budget in order to have more employees to carry out the public policies. At the same time, the mayors who cannot obtain public revenues for their own functioning should be abolished by merging the villages.

#### **4. Convergence criteria in European Union and the capacity of public finances to sustain investments**

The states from European Union are obliged to adopt the single European currency, Euro, but they do not have a deadline within which to adopt. In 1999 and 2001, 12 of the oldest and most developed countries in the European Union adopted the euro, with the exception of the United Kingdom, Sweden and Denmark. Subsequently, with the enlargement of the European Union in 3 waves starting with 2004 for the states of Central, Eastern and Southern Europe, these states also started to adopt the European currency.

Before adopting the euro, the new Member States must comply with certain convergence criteria, namely the criteria imposed by the Maastricht Treaty (1992). At the same time, it must be part of the European Exchange Rate Mechanism (ERM). Some new member states have already adopted the euro: Slovenia, Cyprus, Malta, Slovakia, Estonia, Latvia and Lithuania. It should be noted that these countries are smaller countries among the new member states and the largest countries (Romania, Poland, Hungary and the Czech Republic) have not yet entered the European Exchange Rate Mechanism II. At present, Denmark, Croatia and Bulgaria are part of the euro antechamber, ERM II.

The five convergence criteria set out in the Maastricht Treaty are inflation (Harmonized Index of Consumer Prices), government debt, budget deficit, exchange rate stability and long-term interest rates. At the same time, this is

important for the state's desire to adopt the euro, so that the necessary legislation is adopted for this. It is noted that from the point of view of public investments, the second and the third indicator greatly influence this economic category.

The government budget deficit must be a maximum of 3% of the gross domestic product and the public debt must not exceed 60% of the gross domestic product. It is important to have space available for investment because investments lead to long-term economic growth.

According to Eurostat, the budget deficit in 2019 in the 28 Member States (including the United Kingdom) was 0.8% of gross domestic product. The budget deficit in the 19 Euro area countries was 0.6% of gross domestic product. These data show that the eurozone countries have a stronger financial position.

The largest budget deficit in the European Union in 2019 was registered in Romania and was 4.4% followed by France with 3%. Therefore, Romania was the only country in the European Union that did not comply with the convergence criterion on the budget deficit in 2019. There are countries in Central and Eastern Europe that had a budget surplus, Bulgaria (1.9%), the Czech Republic (0, 3%), Estonia (0.1%), Croatia (0.4%), Lithuania (0.3%) or Slovenia (0.5%). Thus, it can be seen that Romania's model of achieving large budget deficits, including in periods of economic growth, such as 2012-2019 is not effective if these deficits are not aimed at financing public investments but are directed at pension expenditures and wages.

Regarding the public debt at the level of the European Union, the most indebted countries in 2019 is 77.6% of the gross domestic product for the 27 member states (without Great Britain). Eurozone countries are more indebted, the public debt within them being 84% of GDP in 2019. The most indebted country is Greece (180.5%) and the country with the lowest public debt is Estonia (8.2%). Romania's public debt is down 35.3% from 39.2% in 2014, the downward trend in public debt is positive but this debt has increased due to the economic and health crisis caused by coronavirus. Thus, due to this financial crisis, the capacity to make investments decreased because more financial resources had to be allocated for public health expenditures.

## **5. Conclusion**

The main limitations identified in the analysis of the international literature is represented by underinvestment (Canada), increasing the capacity of public authorities through the merger of municipalities (Italy) and the allocation of subsidies at the central level for municipalities with lower revenues (Japan). In order to stimulate the efficiency and increase the allocation for investments within the local public administration, a financial model could be imposed that would impose certain conditions for the financial allocation from the central level to the local public administration. This model of financial allocation would imply that the maximum number of employees of the municipality should be based on the revenues obtained from the local budget and not according to the number of inhabitants. Thus, the mayors would be stimulated to increase the revenues to the local budget in order to have more employees to carry out the public policies. At the same time, the mayors who cannot obtain public revenues for their own functioning should be abolished by merging the communes. Another solution is to merge the villages, which would lead to a reduction in expenses.

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## **PUBLIC LOANS FOR LOCAL PUBLIC AUTHORITIES - CASE STUDY IN THE MUNICIPALITY OF ORADEA**

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**Abstract:** The main goal of this paper is to analyse the role of the public loan and the sustainability of the local public finances from Oradea. First of all, we have to present the factors that influence the public debt service for a Romanian municipality. These factors are represented by the own revenues, the indebtedness limit of 30% imposed by the law of the local public finances, the annual service of the public debt as well as the interests and the commissions afferent to the public debt. There are 4 key case studies that show how public debt in developed countries has been reduced. It should be noted that public debt influences the ability to make investments. One method of reducing the public debt in Oradea was represented by the economic growth combined with moderate inflation and the second method was represented by the fiscal policy of increasing the taxes as well as the increase of the rigor in making the expenses. A limitation of this analogy is represented by the fact that in the paper certain countries are analysed and the comparison is made regarding the Municipality of Oradea.

**Keywords:** *sustainability, public loans, development, public debt*

**JEL classification:** *H72; H83; Q56; H63, H62, H12*

### **1. Introduction**

One of the objectives of this paper is the analysis of the role of public loans accessed by local public administrations. In this paper the emphasis is on the Municipality of Oradea and the way in which it managed to develop and to decrease at the same time the degree of indebtedness. The most important limitations in carrying out this work is represented by the fact that the specialized literature presents, in most cases, the situation of indebtedness at the level of a country or at regional level, presenting less the situation of indebtedness at local level.

One of the most important sources of public investment is loans. In order to analyse the efficiency of a loan investment, it is necessary to carry out a cost-benefit analysis that demonstrates that the investment is necessary and that it will bring important economic and social benefits in relation to the cost of the investment. Public loans are a form of mobilization of money by public authorities in a state. Thus, future resources are anticipated to cover public expenditures. State creditors receive a consideration for the loan granted, interest.

## **2. Literature review**

In this section I will present the main conclusions of the researchers regarding the importance of the public debt for the sustainability of public finances and for the development of infrastructure.

Regarding the public debt, first of all it should be mentioned that there are limits imposed for the local public debt, limits imposed by the Ministry of Public Finance. It should be noted that public debt influences the ability to make investments. Marcel Ioan Boloş (2007) presents the concept and defining elements of public debt. Thus, the public debt is represented by the loans contracted by the central, local public authorities and other public entities from the internal market and from abroad. Dornbusch Rudiger and Fisher Stanley (1997) analyse budget deficits and public debt. Thus, there is a burden of public debt and if deficits are perpetuated, with deficits occurring every year, public debt increases.

Bernadini Sofia, Carlo Cottarelli, Giampaolo Galli and Carlo Valdes (2019) present the experience of reducing public debt in advanced economies in the last 70 years. There are 4 key case studies that show how public debt in developed countries has been reduced. The first example is the reduction of public debt after the Second World War, a reduction caused by the high rate of inflation that eroded the value of debt. The second example is the Bretton Woods era when high economic growth combined with average inflation led to declining public debt. The third example is the policy of spending cuts and tax increases started in the 1980s and the fourth example is the restructuring of Greece's public debt after 2010 as a result of the sovereign debt crisis. The authors believe that the only way to reduce public debt at this time in Eurozone countries is to record budget surpluses. This paper is relevant because of these 4 methods presented for reducing public debt; some were also used in Oradea. One method of reducing the public debt in Oradea was represented by the economic growth combined with moderate inflation and the second method was represented by the fiscal policy of increasing the taxes as well as the increase of the rigor in making the expenses. A limitation of this analogy is represented by the fact that in the paper certain countries are analysed and the comparison is made regarding the Municipality of Oradea.

Bernard Dafflon, Beer-Tóth Krisztina (2009) mentions that successful financial management requires a proactive attitude and adjustment of investment policy in relation to the degree of indebtedness. The authors recommend budgetary responsibility in relation to budgetary discipline. The city of Oradea has adapted the investment policy, respectively the provision of facilities for investors so as to increase the number of jobs and implicitly the city's own revenues and to decrease the public debt.

## **3. The direction of public loans accessed by the Municipality of Oradea**

First of all, we have to present the factors that influence the public debt service for a Romanian municipality. These factors are represented by the own revenues, the indebtedness limit of 30% imposed by the law of the local public finances, the annual service of the public debt as well as the interests and the commissions afferent to the public debt. Even if these data were presented on the website of Oradea Municipality in thousands of lei for an easier understanding of them, they were converted into euros.

The first factor that influences the local public debt is the own revenues. There is a decrease in 2018 of own revenues and a significant increase in 2019. The decrease in 2018 is determined by Government Emergency Ordinance no. 114/2018 by which the budget surplus from the end of the year had to be returned to the central government. At the same time, there is a significant increase in 2019 when this provision was no longer in force. Own revenues are extremely important and to increase the maximum limit of public debt a municipality can opt to increase its own revenues (creating jobs, supporting companies, increasing the collection of local taxes and supporting economic growth that will increase revenues).

The second factor is the public debt limit. This 30% limit is imposed by the Law on Local Public Finances and is considered a limit that ensures the sustainability of local public budgets. Thus, it is important for a municipality to try to obtain as many funds as possible through all possible sources (non-reimbursable funds, loans and own revenues) but in terms of loans they must not exceed the limit of 30%. Municipalities can exceed the 30% limit only if they borrow to pay their own contribution to projects from European funds. It is very difficult to believe that the Ministry of Finance would agree to change this limit. I consider that it is not necessary to change the indebtedness limit of 30% because the municipalities would be tempted to borrow without thinking about increasing their own revenues and non-reimbursable funds revenues. A negative aspect is represented by the local public authorities that borrow for clean expenses (such as salaries) because it is recommended to use loans only for investments.

It can be seen that the public debt service decreased a lot in the period 2017 - 2019, from 19 million euros to less than 10 million euro; this is a favourable aspect that shows the financial sustainability of the local budget of Oradea. At the same time, the public debt service increased in absolute value but also as a percentage. At the same time, the indebtedness limit has increased due to the increase of own revenues. In 2017, Oradea could still borrow 1.7 million euros and in 2018 and 2019 it reached an unused limit of 14 million euros.

The third factor of analysis is represented by the public debt service. The local public debt decreased a lot between 2017 and 2019, from 19 million euros to less than 10 million euro; this is a favourable aspect that shows the financial soundness of the local budget of Oradea Municipality. At the same time, the debt limit increased in absolute value but also as a percentage. At the same time, the indebtedness limit has increased due to the increase of own revenues. In 2017, Oradea could still borrow 1.7 million euro and in 2018 and 2019 it reached an unused limit of 14 million euro.

**Table 1:** Local public debt of Oradea in the period 2017 - 2019 (Euro)

Nr.Crt.	Execution of local budget	2017	2018	2019
1	Own Income	69,779,365	67,926,946	81,695,122
2	Debt limit (30% of own income)	20,933,809	20,378,084	24,508,536
3	Annual local public debt service	19,145,174	6,323,860	9,987,677
4	The difference between Debt limit (2) and Annual local public debt service (3)	1,788,635	14,054,224	14,520,859
5	Degree of indebtedness (%) (annual debt / own income service x 100)	27.44%	9.31%	12.23%

Source: The Municipality of Oradea, Public debt service,  
<http://www.oradea.ro/subpagina/datoria-publica>, 05.11.2020

According to the second table, it can be seen how the local public debt service was divided between 2017 and 2019 and how it is forecasted between 2020 and 2040. It can be seen that interest rates and commissions are estimated between 6% and 10% of the public debt service in the period 2017 - 2025, except for 2018 when they were almost 17%. This aspect can be explained by the fact that the public debt service was very low in 2018.

**Table 2:** Annual local public debt service in the period 2017 - 2040 (million Euro)

Execution and forecasts of local budget	2017	2018	2019	2020	2025	2030	2035	2040
Annual local public debt service	19.15	6.32	9.99	9.08	9.00	3.63	1.98	1.70
Repayments from main credit	17.97	5.25	8.95	8.28	8.27	3.55	1.93	1.68
Interests and commissions	1.14	1.05	1.02	0.79	0.74	0.08	0.04	0.01
Repayments from main credit	93.9%	83.1%	89.6%	91.2%	91.8%	97.8%	97.7%	99.3%
Interests and commissions	6.1%	16.9%	10.4%	8.8%	8.2%	2.2%	2.3%	0.7%

Source: The Municipality of Oradea, Public debt service,  
<http://www.oradea.ro/subpagina/datoria-publica>, 05.11.2020

#### 4. Conclusion

Therefore, the sustainable policy of the Municipality of Oradea regarding public finances is noticeable. The efficiency of public expenditures has led to a decrease in public debt but also to economic development because investments in public infrastructure have been made.

It can be seen that the public debt service decreased a lot in the period 2017 - 2019, from 19 million euro to less than 10 million euro; this is a favourable aspect that shows the financial sustainability of the local budget of Oradea.

One method of reducing the public debt in Oradea was represented by the economic growth combined with moderate inflation and the second method was represented by the fiscal policy of increasing the taxes as well as the increase of the rigor in making the expenses. A limitation of this analogy is represented by the fact that in the paper certain countries are analysed and the comparison is made regarding the Municipality of Oradea.

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## BLOCKCHAIN FOR BANKING: OVERVIEW AND EXAMPLES

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**Abstract:** *Blockchain, the disruptive technology that caused a sudden hype for years, continues so beyond its initial use through Bitcoin in the financial sector as cryptocurrencies emerged. The technology promises to revolutionize the banking industry by means of assured data transparency, security and immutability in numerous banking services. For instance, information flow, payment clearing and cross-border transactions. However, not many applications of the blockchain technology have been successful like bitcoin. In this paper, an overview of the blockchain technology's concepts is highlighted, a general understanding of how it integrates, where it applies and what it brings to the table in the banking industry is fostered. Furthermore, the author presents executed and successful examples of diverse blockchain applications within the financial and banking industry practices, implemented by major banks in forms of private conduct and the joint efforts of banks (consortium) and FinTechs (Financial Technology) companies. Which indicate how we can improve banking and financial services in various manners with blockchain technology' abilities.*

**Keywords:** Blockchain, Banking Industry, FinTech, Financial Services, DLT

**JEL classification:** G23; G29; O31

### 1. Introduction

Global financial infrastructure, transfer of assets and banking practices, appear to have the potential of optimization and enhancement through the blockchain technology. More than the current financial systems with the efficiency and security the technology brings forth. Let's consider transactions, financial contracts and systems. Those play a key role in our economy drive forward, being the crucial tools in assets management and managerial actions. Nevertheless, these tools have to live up to the latest financial and economical digital transformation. With that being the matter. Blockchain technology comes armed with the critical disruptive means to resolve drawbacks in these systems and improve their practices. One of the most applicable and promising areas of implementation of the blockchain technology is its use in the banking sector to increase the level of security, a higher transparency and reduce costs. And due to the need of banks, business and society in these three aspects, any work or development in this area becomes quite relevant. Hence, there are great numbers of increasing attention and efforts placed into the development of blockchain technology from many banks and fintech companies. A substantial weight is being put into the potential of blockchain technology's ability to reduce operational costs. The development to improve the efficiency of blockchain technology's backend processing gained the interest of the major banks and financial institutions. (Guo and Liang, 2016).

## **2. Blockchain overview**

The definition of Blockchain can be determined as in "business innovation through blockchain" one of the most well-known books about blockchain by Vincenzo Morabito (2017, p.4), where he defined blockchain technology as a public repository of data which is hack-free. In this network each and every transaction will be perceived in the network to everyone participating, as the transactions are registered. any transaction will be viewed as legitimate and recognized as long as it is validated by the majority and more than 50% of the participants in the network. Which decree that no one participant inside the network or some other outside it can make or change a transaction, except if the majority of the other participants (>50%) affirm.

To put it in short, blockchain is a decentralized storage network. Also known as Distributed Ledger Technology (DLT). Blockchain for the mainly comprises of three layers: storage layer having information, network layer by which hubs associate with one another, and consensus layer used to maintain the consistency. Blockchain exploits the permanence, decentralization, auditability and persistency, to provide secure and consistent administrations.

### **2.1. Blockchain technology concept**

Peer-to-peer (P2P) network is the way how the blockchain is executed, it represents the backbone for a blockchain. The majority of the peer-to-peer network participants must come to an accord which is necessary in order to make a new block or apply any changes to the data of an already existing block for a transaction after it is registered, as a block cannot be changed or altered without changing all other blocks, thus highlighting the core security concept of blockchain. Smart-contracts, one of the most utilized and innovative application which operates upon the blockchain protocols. Are a software algorithm capable of performing the functions of a paper document when a certain event occurs (events pre-determined by the involved parties). A smart contract fulfills by itself the pre-determined clauses of the contract specified in it. An important feature of smart contracts is that they are not on the server, but directly in the block-chain, therefore, they have reliable cryptographic protection. Smart contracts do not include any involvement of any party. This means that these contracts are decentralized and automated, which allows them to operate without intermediaries and regulators as third parties. Thus, enabling, confirming and enforcing the contract terms of agreement automatically.

## **3. Blockchain for banking**

In banking industry, a central bank for example, will act as the central authorizing party for a transaction, an intermediary in other words. Wherein, the concept of blockchain is the digital form of structured data which enables a digital ledger to be shared across all network nodes without the need for a central authority or an intermediary. Digital currencies such as Bitcoin and Ethereum are based on the technology of blockchain, as the principal foundation. There are substantial investments from many leading financial enterprises into the technology of blockchain for banking and financial industry improvement purposes in several aspects. 92% is the share of managers of banks and insurance companies around the world who think Blockchain will have an impact on their industry or business (Deloitte & Efma, 2016). Doubtlessly, blockchain is on financial institutions

executives' agenda, with the majority of them projecting that blockchain will have a huge impact of 85% within 2020 (Deloitte & Efma, 2016). Furthermore, Business Insider (2019) reported in their "The Fintech Ecosystem Report", that concluding of third quarter in 2018, a total funding of \$32.6 billion was amounted universally. Setting a novel stretch in the Fintech industry funding.

### **3.1. Features of transactions with blockchain**

Blockchain fundamentally changes the classical system for financial transactions and payments for banking functions. When it comes to data security and transparency blockchain tremendously increases its level, whereas, it also provides credibility for participants and the entire system. For instance, if a transaction is sent, a participant can see the information of the participant performing the transaction and to whom it is being transacted, however, they cannot identify those participants. Since the principal mechanism of blockchain (DLT) functionality is the distribution among all participants (nodes) it, as a result, induces a high performance system. That performance which cannot be jeopardized in the case of one or more of the participants having been hacked or shut down (as long as the event does not affect more than 50% of nodes, which is practically a mission-impossible). It will not affect the overall performance of the system. Applying the blockchain system functions will result in an abundant decrease to the time and cost of the transactions and payments, owing to blockchain decentralized system eliminating the necessity of any centralized organizations to be involved as arbitrators of trust like banks, financial institutions and notaries etc...

The alternative solution offered by the blockchain (DLT) system is based on the method of transaction verification (blocks) by participants of the network, through distribution of the data to all participants of the system, leading to transparency regarding transaction's information. Establishing trust among the network participants in a decentralized manner and with the absence of any intermediary, on grounds of the high security level and cryptography of the system.

Relationships between banks own interbank settlements, clearing settlements, transfers between customers of different banks and so on require a private blockchain with larger processing powers that would cover several banks. And banks are on the path of achieving that gradually, through, "consortium" the joint collaboration and development of many banks and the number of them getting onboard keeps building up.

### **3.2. Examples of blockchain applications in banking**

UBS bank conducted smart bonds project based on the blockchain principles that as per blockchain and smart contracts' protocols, delivered fully automated risk-free bond's issuance, interest calculation, coupon payments and maturation processes alongside a confirmed ownership of those smart-bonds. The application eliminates the need for pre- and post-trade intermediaries as it automatically handles the flow of information and money between the issuer and the buyer (UBS, 2016). Although being hesitantly embraced, the buzzing blockchain technology is building up momentum in banking and financial sector, as denoted by HSBC bank (HSBC, 2019). The bank stated that is has settled over three million FX (Foreign Exchange) transactions and made over 150,000 payments worth \$250 billion since February 2018 using its own blockchain "FX Everywhere". The bank also mentioned that the amount settled by blockchain protocols is merely a small portion

(Wilson, 2019). Nonetheless, the use of blockchain by typical finance and in such use-case, is represented as a significant breakthrough with this information. Considering the hesitation of typical finance to apply the technology in any manner, up until this point.

#### 4. Conclusion

Blockchain technology has the ability to improve and transform financial services in the banking industry in many terms, such as cross-border transactions, payment clearing and information flow. Moreover, Blockchain protocols make it that financial services are secured, transparent and reduced in cost of service operations with the technology's automation and cutting on the services time, in return boosting efficiency for banking industry.

Big number of banks around the world invest and put in efforts into the development of blockchain technology to revolutionize, and thus enhance the financial services. Some already with successful attempts based on the blockchain, as the aforementioned examples demonstrated. Banks increasingly join forces as a consortium and with Fintechs, in order to accumulate knowledge and progress in the development of blockchain applications, which is possibly the most driving way for banks to upscale its use.

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## USING FAIR VALUE MODEL AND REVALUATION MODEL IN THE BUX INDEX COMPANIES

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**Abstract:** *The study's main goal is to examine the models used for measurement after recognition of properties, plants and equipment, intangibles, and investment properties for the companies of the BUX index. Since the BUX index contains companies listed in the Budapest Stock Exchange, they should obligatory be preparing their financial statements under the International Financial Reporting Standards (IFRS). The study examines these companies whether they prefer to use the historical cost model similar to the model used in the Hungarian Accounting System (HAS.), or they take advantage of the transition to IFRS and prefer to use models that shows the mentioned assets at fair value in their books. The study points out that the previous HAS' routines have remained after the IFRS transition.*

**Keywords:** IFRS; historical cost model; revaluation model; fair value model; BUX index; PPE; intangibles; investment properties.

**JEL classification:** M41

### 1. Introduction

Increasing globalization and companies' internationalization caused required the development of a common accounting language. The development of a unified, harmonized accounting system occurred in the 1970s and 1980s when the European Union issued regulations, directives, communications, and recommendations about accounting (Ortega, 2017). In the end, the International Financial Reporting Standards became the Sikalidis and Leventis (2017) empirically presented that fair value adjustments on an investment property are persistent, while they are transitory in the case of financial securities. They showed that only fair value adjustments of investment property are distributable as dividends, retained earnings, and taxes.

As it is shown on Figure 3, the difference between the carrying amount and the fair value will be directly recognized in the profit or loss, which had advantages and disadvantages as well, it depends on the change in fair value.

Razak and Stainbak (2018) examined 82 non-financial South African companies listed on the Stock Exchange. They found that where IFRS provides free choice, most of the companies examined did not choose the fair value accounting.

common accounting language supported by the EU. The EU countries have gradually introduced IFRS and made them obligatory for appointed groups of companies. In 2005, the EU prescribed for listed companies to prepare their consolidated financial statements under IFRS (Ortega, 2017).

From 2017, using IFRS became obligatory for companies they trade whose securities on a regulated market in any European Union Member State. The listed companies of the Budapest Stock Exchange (BÉT) prepare their financial statements under IFRS. This study's aim to determine whether the companies of the BUX index harness the advantage of IFRS for the measurement after recognition and prefer to use the fair value or revaluation model to evaluate their assets, or the historical cost model, which is closer to the Hungarian Accounting System (HAS) for measurement after recognition. Israeli (2015) found that companies in the EU countries used a similar model to the historical cost model, and this choice remained after the transition to IFRS. The study deals with properties, plants, and equipment (PPE), intangibles, and investment properties. It presents a brief literature review about the measurement after recognizing assets mentioned above regarding the method that HAS use concerning tangibles and intangibles. Then I present the three main standards in IFRS that apply to PPE, intangibles and investment properties. I highlight the major differences and similarities between the HAS and IFRS measurement. I highlight the advantages and disadvantages of the models.

## 2. Measurement after recognition

The value of non-current assets is one of the primary issues of any accounting system since they are an integral part of the total assets of most companies (Jana and Jitka, 2014). IFRS makes a specific distinction between non-current assets and current assets. Non-current assets include PPE, to which IAS 16 applies.

On the other hand, a company must treat investment properties separately under IAS 40. Non-current assets also include intangibles that are treated under IAS 38 (except for goodwill). Subsequent measurement or measurement after recognition can be very challenging for non-current assets. Different accounting methods lead to different results in point of the value of the non-current assets in the books and terms of the profit or loss as well. In the next chapters, I give a brief review of the measurement after recognition in the Hungarian accounting system and IFRS concerning PPEs, investment properties and intangibles.

### 2.1. Measurement after recognition in the Hungarian accounting system

In contrast to IFRS, the Hungarian accounting system classifies the non-current assets differently. The Hungarian accounting system distinguishes three main groups. The first is intangible assets, the second is tangible assets, and the third is long-term financial assets and securities. I do not deal with fixed financial assets in this study. One of the main differences between the two accounting systems is in the case of the properties since the Hungarian accounting system does not make any difference between owner-occupied properties and investment properties.

<p><b>Measurement at recognition (Initial cost)</b>  Cost of purchase and directly attributable expenditures</p> <p><b>Measurement after recognition:</b>  Initial cost  Less accumulated depreciation  Less accumulated impairment loss  Plus any reversal of impairment</p>
<p>Carrying amount (net book value)  <b>Adjustment to market value</b></p>

**Figure 1:** Valuation of intangibles and tangibles in the Hungarian accounting system

Source: own editing based on Siklósi and Veress (2018)

Figure 1 shows the steps that should be followed when determining net book values of intangibles and tangibles. Important to note that there are a few exceptions, especially concerning the self-produced intangibles since there is not a purchase cost in that case. The initial cost contains the purchase cost and other attributable expenditures. After determining the initial cost, the company starts to charge depreciation using a chosen method. On the one hand, this account of depreciation leads to a decrease in the asset's net book value until the end of its useful life.

On the other hand, the profit or loss will also decrease by the charged depreciation amount. A company should apply impairment if an asset becomes redundant because of a change in business activity, or for damage or any reason, become unusable (Act C of 2000). The write-down must be made till the market value of the asset. If the asset cannot be used or destroyed after the write-down, the asset must be derecognized. Impairment can be reversed if the basis and the reason for the impairment no longer exist (Róth et al., 2015). The carrying amount could be determined according to Figure 1.

After that, the companies had the right to adjust the value of the assets to the market value. This decision should be made at the beginning of the financial year and stated in the accounting policy. Suppose the market value is greater than the carrying amount before the adjustment so that the difference will appear in a separate line on the asset side at the "value adjustment of tangible/intangible assets" item. The net book value will not be affected, so the depreciation expense will remain as if the adjustment not happened. On the other hand, there will be an increase in the valuation surplus/reserve item of the equity, so the profit or loss will not be affected. Suppose that the market value is smaller than the carrying amount before the adjustment, so the difference must be reversed from valuation surplus/reserve, or if there is no valuation surplus for the asset, it must be an impairment loss. In this case, the net book value of the asset can be affected, and the profit or loss can decrease as well. In summary, the company had the right to present the tangibles and intangibles at market value, but the difference should be treated separately, and any enlargement in the profit or loss (except reversal of impairment) is prohibited. Not many companies exercise the right to value adjustment, for the principle of consistency, value adjustment should be made every year.

## **2.2. Measurement after recognition in IFRS**

In the Hungarian accounting system, the concept of fixed assets and their classification is laid down by law, while IFRS follows a completely different logic (Lukács and Zéman, 2014). The IFRS first defines current assets and states what does not qualify as a current asset should be classified as non-current assets (Lakatos et al., 2013). IFRS is rather principle-based than a rule-based (Hamad, 2019). Many standards set out how tangibles, intangibles must be recorded in accounting and presented in the statement of financial position. I applied my examination to PPE (IAS 16), intangibles (IAS 38), and investment properties (IAS 40).

### 2.2.1. Measurement after recognition under IAS 16 and IAS 38

Both IAS. 16 and IAS 38 apply a very similar way to the subsequent measurement. A company can choose between two models of the subsequent measurement. Figure 2 shows the difference between the two models regarding measurement after recognition.

<b>Historical cost model</b> <b>Measurement at recognition (Initial cost)</b> Cost of purchase and directly attributable expenditures  <b>Measurement after recognition:</b> Initial cost Less accumulated depreciation  Less accumulated impairment loss  Plus any reversal of impairment	<b>Revaluation model</b> <b>Measurement at recognition (Initial cost)</b> Cost of purchase and directly attributable expenditures  <b>Measurement after recognition:</b> Fair value, revalued amount Less subsequent accumulated depreciation  Less accumulated subsequent impairment loss
Carrying amount (net book value)	Carrying amount (net book value)

**Figure 2:** Valuation of PPEs and intangibles in IFRS

Source: own editing based on Bae et al. (2019)

The historical cost model is where the PPEs and intangibles are recorded at their initial cost less accumulated depreciation and accumulated impairment losses plus a reversal of impairment (Esen and Perek, 2016). This model is easy to use since an entity can easily determine the initial cost and then charge depreciation every year. Meanwhile, the company must perform an impairment test under IAS 36. The historical cost model in IFRS is similar to the model used in the HAS concerning measurement after recognition, without applying adjustments to market value.

Determining the initial cost based on the revaluation model is the same, but there is a difference when, in the case, the subsequent measurement. The carrying amount must be at the revalued amount less subsequent accumulated depreciation and subsequent accumulated impairment losses (IASB, 2020). The model's main advantage is that the company can present its PPEs and intangibles in "fair value". However, it is essential to mention that the revaluation of PPEs and intangibles is one of the most controversial topics in accounting since it is allowed under IFRSs but prohibited under many other national GAAPs (Lopes and Walker, 2012).

If the fair value is higher than the carrying amount, it should recognize the unrealized gain in the other comprehensive income, leading to an increase in the total comprehensive income. The other comprehensive income will be accounted for under the revaluation surplus of equity. If the fair value smaller than the carrying amount, the unrealized loss will be deducted from the revaluation surplus, and then the profit or loss will be decreased.

Some matters need to be considered before choosing between the two models for subsequent measurement.

- Concerning the revaluation model, the company must be able to measure the fair value, which can be a market-based or an internal estimation. This means the asset must have an active market, or the company should be able to measure the future cash inflows generated by the asset.

- Suppose a company adopts one of the two models for a specific asset, and then the whole class of given asset should be valued applying the chosen model in that case. So if a company applies the revaluation model for a specific land, then all the lands controlled by the entity should be revalued by the revaluation model.
- If the revaluation model is the chosen model for measurement after recognition, that should be done with sufficient regularity.

### 2.2.2. Measurement after recognition under IAS 40

In IFRS an entity must treat investment properties separately under IAS 40. Investment property is held to earn rental, and they are not owner-occupied. Concerning measurement after recognition, companies must choose between the historical cost model and the fair value model.

Figure 3 shows the difference between the two models in terms of investment properties. The historical cost model is similar to the one I explained in terms of IAS 16 and IAS 38.

The historical cost model is where the investment properties carried at the initial cost less any accumulated depreciation and any accumulated impairment losses (IASB, 2020). This model is easy to use since an entity can easily determine the initial cost and then charge depreciation every year. Meanwhile, the company must perform an impairment test in accordance with IAS 36. Important to mention that the historical cost model in IFRS is similar to the model used by the HAS in terms of measurement after recognition without the adjustment to market value. A company chooses the fair value model must measure the investment properties at fair value, and any gain or loss arising from a change in fair value should be recognized in the profit or loss/net profit (Kieso et al., 2020). For that reason, charging depreciation will become redundant since the assets are always shown at the fair value. It is also redundant to charge any impairment loss, so IAS 36 do not apply to investment properties under the fair value model (Mirza and Holt, 2011).

The fair value can be based on the market approach if the investment property's value is adjusted to the market value or on the income approach if all cash flows generated by the asset are discounted (Sundgren et al., 2018). In both cases, the fair value determination can be cumbersome continuingly. However, a company must be able to measure the fair value of an investment property regularly reliably (Bandyopadhyay et al., 2017).

Historical cost model	Fair value model
<b>Measurement at recognition (Initial cost)</b> Cost of purchase and directly attributable expenditures  <b>Measurement after recognition:</b> Initial cost Less accumulated depreciation  Less accumulated impairment loss Plus any reversal of impairment	<b>Measurement at recognition (Initial cost)</b> Cost of purchase and directly attributable expenditures  <b>Measurement after recognition:</b> Initial cost Plus gain or loss arising from the change in the fair value of investment property
Carrying amount (net book value)	Carrying amount (net book value)

**Figure 3:** Valuation of investment property in IFRS

Source: own editing based on Lutilsky et al., (2014)

Sikalidis and Leventis (2017) empirically presented that fair value adjustments on an investment property are persistent, while they are transitory in the case of financial securities. They showed that only fair value adjustments of investment property are distributable as dividends, retained earnings, and taxes.

As it is shown in Figure 3, the difference between the carrying amount and the fair value will be directly recognized in the profit or loss, which has advantages and disadvantages as well, it depends on the change in fair value.

Razak and Stainbak (2018) examined 82 non-financial South African companies listed on the Stock Exchange. They found that where IFRS provides free choice, most of the companies examined did not choose the fair value accounting.

### 3. Material and method

This study examines the models used to evaluate the property, plant and equipment, intangibles and investment property shown in the firms' statements of financial positions in the BUX index. The research analyzed 14 companies in the year 2019. The examination aimed to examine which model is preferred by the Hungarian companies investigated to measure after recognition of the assets mentioned. The transition to IFRS has provided several opportunities for companies to take advantage that they can present their assets at a higher value and increase their equity through profit or loss or other comprehensive income. The data was collected from the notes on the financial statements published on the bet.hu.

### 4. Examination of measurement after recognition in terms of BUX index companies

There are 14 companies in the BUX index which prepare their financial statements under IFRS. The first step was examining how many companies had PPE, intangibles and investment property in 2019 (Table 1). If an entity does not own any of the mentioned assets above, I tried to examine what model they would use if they own any.

**Table 1:** The number of companies owned investment properties and PPEs

	<b>Intangibles</b>	<b>PPEs</b>	<b>Investment property</b>
own	11	12	5
do not own	3	2	9
Total	14	14	14

Source: own calculation based on the company's balance sheets

As shown in Table 1, most companies have owner-occupied properties, plants and equipment. Only 5 of the companies examined possess investment properties in terms of intangibles 79% of the company's intangibles.

#### 4.1. Examination of measurement after recognition of PPE and intangibles in terms of BUX index companies

As the next step, I examined the models used for PPE (Table 2).

**Table 2:** The models used for measurement after recognition of PPE.

	<b>Number of companies</b>
Historical cost model	12
Fair value model	0
Total	12

Source: own calculation based on the company's balance sheets

As in Table 2, none of the companies who owns PPE chose to present their property, plant and equipment using the revaluation model. Even though IFRS allowed companies to present their assets at fair value, none of the companies used that. They preferred to use a simpler model to the method used in Hungarian accounting in terms of presenting their PPEs. The same situation is regarding intangibles (Table 3).

**Table 3:** The models used for measurement after recognition of intangibles.

	<b>Number of companies</b>
Historical cost model	11
Fair value model	0
Total	11

Source: own calculation based on the company's balance sheets

As in Table 3, none of the companies who owns intangibles chose to present their intangibles at fair value by the revaluation model. Unlike PPE, it is more difficult to determine the fair value of intangible assets, which gives the reason for companies to prefer the historical cost model.

Now let us pretend that a company own PPE or intangible and the fair value of the asset is constantly increasing. The company can choose between two models. Assume that the chosen model is the historical cost model. In that case, the value of the asset will constantly decrease year by year with the amount of depreciation expense. On the other hand, the net profit or loss will constantly decrease, which will lead to a decrease in the retained earnings. In this case, the company will not present the asset at fair value and will not apply any revaluation, and only the asset and the retained earnings are affected.

Now let us assume that the company chooses the revaluation model. The value of the asset will increase with the difference between the carrying amount and the fair value, on the other hand, the other comprehensive income will increase with the same amount leading into an increase in the total comprehensive income but not affecting the net profit or loss.

The other comprehensive income will be accumulated in the revaluation surplus of the equity, not affecting the retained earnings. Although the increase in the other comprehensive income does not affect the retained earnings directly, the increase in the asset value will cause an increase in the depreciation expense since the base of the depreciation calculation will increase. From this point of view, the net profit or loss, and the retained earnings will be lower in the case of the revaluation

model. Fortunately, an entity can choose between two methods to transfer the unrealized gain revaluation surplus to retained earnings. The first one is to transfers the revaluation surplus directly to the retained earnings when the asset is derecognized (IASB 2020). The second one is to transfer the revaluation surplus as it uses the asset with the difference between the new and old depreciation expense (IASB, 2020). Although transferring the revaluation surplus to retained earnings as it uses the asset can balance the retained earnings, but the depreciation expense still higher with the new depreciation and that will cause a lower net profit or loss.

Obviously, the revaluation value model can lead to extra expenses and additional work and generates a lower net profit or loss.

#### 4.2. Examination of measurement after recognition of investment properties

After that, I examined the models used for PPEs (Table 4).

**Table 4:** The models used for measurement after recognition of investment properties.

	<b>Number of companies</b>
Historical cost model	3
Fair value model	2
Total	5

Source: own calculation based on the company's balance sheets

As shown in Table 4, only 2 companies choose to use the fair value model for recognition after measurement. Although the rest of the companies do not have investment properties, they stated in the notes of the financial statements they evaluate only financial assets at fair value and use the historical cost model for any other asset. It means that 40% of the companies (that owns investment properties) would decide to present their investment properties on fair values. Although other companies do not have investment properties, the chosen method would be the historical cost model.

Now suppose that a company owns real estate that is held for investment, and the fair value of the asset is constantly increasing. The company can choose between two models. Assume that the chosen model is the historical cost model, and in this case, the effect on the statement of financial position will be similar to the historical cost model concerning PPEs and intangibles. The value of the asset will constantly decrease year by year with the amount of depreciation expense. On the other hand, the net profit or loss will constantly decrease. Here, the company will not present their assets at fair value and will not apply any revaluation, and it affects only the asset and the retained earnings. Choosing the historical cost model leads to a decrease in the profit yearly, which also reduces the retained earnings until the end of the investment property's useful life. On the one hand, that can negatively affect equity, but on the other hand, this leads to a decrease in corporate tax. A lower payable tax can be a reason behind preferring the historical cost model over the fair value model.

Now let us assume that the company chooses the fair model. The value of the asset will increase with the difference between the carrying amount and the fair value. Meanwhile, the net profit or loss will also increase, which will lead to an increase in the retained earnings.

In real estate, a steady increase in value is more likely than a decrease. Therefore, a yield produced in such a way would increase the companies' net profit or loss and compensate for the additional costs. An increase in net profit or loss would positively change the EPS ratio and any profitability ratios that an investor considers essential.

Obviously, the fair value model can lead to extra expenses and additional work, but it also can generate higher income in case there is a constant increase in real estate.

Compared to Razak and Stainbak (2018) results, the situation in Hungary seems to be better. In our case, only 60% of companies examined do not choose the fair value model, compared to the 78% that Raznak and Stainbak (2018) found. However, it is essential to emphasize that this study was conducted with a much smaller number of companies.

The fair value model can be uncertain and can cause more work and cost. On the one hand, any change in the fair value will be directly recognized in profit or loss. On the other hand, an increase in the fair value will increase corporate tax. It is like a company should choose between certainty and uncertainty. Concerning the historical cost model, it is easy to calculate the future net book value of the investment property to make the forecast easily. The fair value model can lead to uncertainty, and it needs to present more internal information in the financial statements.

## **5. Conclusion**

As a result of the research, BUX index companies prefer to use the historical cost model rather than the revaluation model, in the case of PPEs and intangibles. There could be many reasons to prefer the historical cost model over the revaluation model if a company calculates with an increase in the asset value, then that could cost additional cost and work. It presents more internal information, and it will present less profit or loss the statement of total comprehensive income.

It negatively changes the EPS and other profitability ratios, leads to uncertainty when it comes to forecasting makings, sometimes hard to determine the fair value of a certain asset, especially with intangibles. On the other hand, many advantages are behind the revaluation model, such as presenting the assets at a fair value, lower corporate tax will be charged. Obviously, the Hungarian companies choose the historical cost model since it is closer to the previous model they get used to in HAS.

Concerning investment property, it was concluded that most companies prefer the historical cost model, even though they could probably reveal a higher result using the fair value model. Even though most of the examined companies do not have investment properties, they would use the historical cost model. Using the historical cost model is attributable to the model simplicity, or the routine gained from the Hungarian Accounting System's customs. Most of the companies prefer certainty over uncertainty. Even though by choosing the fair value model with a steady increase in the real estate fair value the company can present a higher net profit or loss, positively change the EPS and other profitability indexes, the additional cost will be covered by the gain that comes from the fair valuation.

The study would show a more accurate result if it applied to all Budapest Stock Exchange companies.

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## ERP SYSTEMS A REAL SUPPORT FOR TELEWORK. SOCIAL AND ECONOMIC IMPACT

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**Abstract:** *In this paper we started from the idea of finding an efficient solution for maintaining the jobs with the help of an ERP systems during the COVID-19 pandemic. This pandemic has an economic and social impact on the entire population all over the world. The current research presents the perspective of Romanian respondents about maintaining the current workplace through telework. In this moment, telework is a solution used to continue our economic activity on the labour market. The main objective of the paper was to demonstrate that without computer systems adaptable to the needs of societies, many people could not carry out their activity. This thing would have led to closures companies and layoffs as much as possible. The systems that coped the best with this period were the ERP type. It offers accessibility and facilitate integrated planning for the both, management and human capital. The second objective aimed at analysing the economic and social impact that telework had on Romanian respondents during the difficult period. The research method being a qualitative one, based on interviews with Romanian respondents. These interviews demonstrate the importance of computer systems, so we should work from anywhere at any time.*

**Keywords:** ERP system; telework; teleworkers; interviews; COVID-19 Pandemic;

**JEL classification:** A10, M40, M50

### 1. Introduction

Due to the global pandemic COVID-19, the Romanian companies had to find a solution for maintaining the activity in a very short time. The main efficient solution found by most organizations was telework. In this way, most companies have approved that work is not only a place to go. It is exactly what you know how to do/ manage wherever you are. (Robert E. Morgan, 2004). Alvin Toffler (1980) also states that you don't have to go to the office or the factory to work, work means being able to work from anywhere and anytime. The importance of integrated information systems that can be adapted in any situation to maintain the activity is also analysed. The paper was structured in 7 parts. In the first part of it is presented from a theoretical point of view based on the specialized literature, important information related to telework and information systems, especially those of ERP type. The second part of the paper presents the research / case study based on qualitative analysis, interviews with Romanian respondents. Subsequently, the received answers are analysed and interpreted.

## **2. Literature review**

Telework is considered the flexible work that offers to anybody the possibility to carry out your activity in normal conditions from any place, at any time. In most cases, telework allows "remote work activities without the need for a trip." (Dijst, 2004 cited by Stiles and Smart, 2020). The main obstacles regarding the adoption of telework by companies are: managers' preference to have human capital in the office, career development and professional isolation. (Stiles and Smart, 2020) Teleworkers can be described as employees (human capital) who work at a distance from the physical location of the company in which they work (Robert E. Morgan, 2004). From an organizational perspective, teleworking offers the opportunity to improve human capital productivity. Teleworkers enjoy flexibility, usually take fewer sick or rest leave, they are less absent from work and they have greater satisfaction. This aspect leads to improved individual and overall performance for a company (Nancy Kurland and Diane Bailey, 1999). Moreover, the performance/success of a company depends on real-time information (internal and external) that can be available to the right person at the perfect time for taking crucial decisions (Chen et al, 2006). Therefore, the systems that offer the greatest accessibility on real-time information are of the ERP type. At the same time, they are the main support for organizing telework. ERP systems involve an entire company in a single business process, in which all users are interconnected and can have access to information. These systems are in fact complete software packages and combine in real time all business procedures, from accounting to resource planning, procurement, production scheduling, logistics, sales and human capital management (Cynthia A. Lengnick-Hall et al., 2014). ERP systems are described as a server based on customer needs, through an integrated process (Rosio Alvarez and Jacqueline Urla, 2002)

## **3. Problem statement**

The problem from which we started this research was the COVID-19 pandemic that had a devastating impact on Romanian companies. Many companies closed or continued their activity in a restricted form, sending the human capital into technical unemployment. In order to present the situation in as much detail as possible, we analysed the solutions found by other companies that did not close their activity, or maybe even increased their revenues even in this difficult period. Their main solution was teleworking and, in exceptional cases, the change of the activity company's field (reprofiling the sale of the necessary goods during the pandemic). Many employees work even now through telework, being considered a solution for the future. Companies that had integrated ERP systems went through this period quite easily. The personal idea about the research was to demonstrate that ERP systems are a smart solution for maintaining a company's business. At the same time, we highlighted the economic and social impact that telework had on Romanian respondents during the COVID-19 pandemic.

## **4. Research Questions**

Is telework an effective solution for maintaining activity even during a global pandemic?

Are ERP systems a smart solution to support activities and also to generate support for telework?

What social and economic impact did telework have on Romanian respondents?

## 5. Research Methods

The research methods used to write this article were qualitative, namely interviews with managers and employees. We conducted an interview based on 9 questions, which addressed the current issue. Then we conducted 7 interviews, with two people with management positions, four other people with executive positions, of some companies that operate in Romania market and a person who has his own business, being independent. Based on the answers received, we were able to analyze the impact of ERP systems for maintaining telework activities.

## 6. Findings

The respondents who went through this interview are: Employees of the Contexpert Consulting Group: accountant Patru Corina and auditor Costache Oana; Divertiland Group employee: economist Ghita Anca; Apa Nova employee: economist Mihaela Igna, independent accounting expert Radu Alina; Financial manager at Carpat Sport: Florina Andrei; and Manager Carpat Sport: Motovelea Liviu.

- A first question of the interview was: During the COVID-19 pandemic did you work through telework?

To this question 6 respondents chose to say "yes", while Radu Alina answered "for a while".

- The second question was: How accessible has telework been for companies operating in the market?

To this question Patru Corina and Costache Oana answered "Very accessible" while Mihaela Igna added "Very accessible, I had all the equipment received from work". Ghita Anca stated that "In the company that I operate the telework was very accessible", And Florina Andrei saying her own vision "Quite accessible because all customers and employees were quite familiar with the technology." At the same time, we had 2 answers with "Medium" received from Motovelea Liviu and Radu Alina.

- The third question was: From a social point of view, do you prefer physical work or telework?

Here we had four similar answers "Physical work" from Florina Andrei, Motovelea Liviu, Radu Alina and Mihaela Igna. Costache Oana had a detailed vision, mentioning "I prefer physical work, teleworking significantly reduces social life." Then I received two other similar answers "both options" received from Corina Patru of Anca Ghita

- The fourth question was: From an economic point of view, do you consider teleworking an efficient / inefficient solution?

And to this question I received the similar answer "Efficient" received from Ghita Anca, Costache Oana, Patru Corina, Mihaela Igna and Florina Andrei. Radu Alina had another vision mentioning "An efficient situation in some areas". Motovelea Liviu preferred to add "Quite efficient, reduces certain costs"

- The fifth question: If there were no computer systems adaptable to the individual needs of some companies / organizations / institutions, do you think you could have worked through telework? If so, in what way?

To this question, 6 respondents chose the simple option "No", and Motovelea Liviu mentioned "No, I don't think so".

- The sixth question: Were computer systems the main incentive to support telework?

And to this question I had similar answers from the 6 respondents who chose the simple variant "Yes" and Mihaela Igna added "Of course".

- The last question asked was: How do you see this process? Is telework a solution for the future? If yes / no, why?

Here we received two common answers from Anca Ghita and Mihaela Igna "Yes, because things will evolve in this regard." I received two other similar answers from Corina Patru and Oana Costache "Yes, many employees will want a flexible schedule." Motovelea Liviu had a more detailed answer stating "Yes, it can be, companies will save costs and some employees will prefer teleworking to gain time lost so far on the way to work." And Florina Andrei had a completely different vision, mentioning "Maybe, but I think that solutions must be found for things to return to normal. "

## 7. Conclusion

Based on the answers received, we can state that Romanian respondents have a positive vision about telework. They also believe that without integrated systems and without the support of the IT team, teleworking would not be possible. However, Romanian respondents prefer physical work due to the fact that it affects social life and personal development. Concluding and answering at the research questions as follows: in the case of a global pandemic, telework is indeed an efficient solution, but socially unpleasant. ERP systems are also the mainstay without which telework would not be possible. From the perspective of Romanian respondents, teleworking from an economic point of view is very efficient, because it reduces certain costs, but from a social point of view, they prefer more physical work.

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## **BIBLIOMETRIC ANALYSIS ON EARNING EUROPEAN FUNDS**

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**Abstract:** *The European Union provides financial support to all Member States through the Structural Instruments (Structural Funds) and the Agriculture Funds. The absorption of EU structural funds is an opportunity to sustain economic growth and reduce the development gap which, in the conditions of the global recession, is becoming a new challenge for Romania. The most important benefits of financing (in general) are growth, competitive advantage, employment and improving the environment. In order to conduct the study, so far, we have studied the economic literature in published articles, databases, statistics current. Through bibliometric analysis of existing studies, indexed by the Web of Science database. The biometric analysis helps us to get an overview of the topic. Through the VOSviewer program we made scientific maps to show the field, cooperation between the country, as well as a scientific map of keywords for the publication*

**Keywords:** **bibliometrics; European Union; European funds; economic growth.**

**JEL classification:** G41

### **1. Introduction**

These are non-reimbursable funds, meaning that no interest is charged, and the money does not have to be returned. It is expected to make investments which will generate the increase in gross added value in the field of application.

There are also structural funds, which are specifically intended for poorly developed regions, to recover these developments gaps as soon as possible. Most of the funds are destined for the rural areas. The priority sectors are agriculture, forestry, fisheries, and beekeeping. There are also future programs that have three main priorities: smart growth, sustainable growth, and inclusive growth.

European funds are those financial instruments created by the European Union, for Romania (and not only; Romania is not the only European state that benefits from these instruments), the private and/ or public segment, to develop certain areas and support the member countries to achieve certain standards of development, both economic and social/ cultural. Non-reimbursement funds are those financial support which are granted without being refunded. They are not loans; interests are not charged for accessing the funds and you do not have to repay even 1 euro.

The Structural Funds are financial instruments, managed by the European Commission, whose purpose is to provide support at the structural level. Financial support from the Structural Funds is intended mainly for less developed regions, to strengthen economic and social cohesion in the European Union. The Structural

Funds contribute to 3 strategic objectives of the Economic and Social cohesion Policy of the European Union:

1. Convergence or reduction of development gaps between regions. States can apply for funding for regions with GDP/ capital below 75% of the European average.
2. Regional competitiveness and employment. States may apply for funding for regions that are not eligible for the Convergence objective
3. European territorial cooperation. Thematic objective that supports the adaptation and modernization of policies and systems of education, training, and employment.

## **2. Brief review of the literature**

We find the concept of rural development all the more mentioned today. Although it seems to be a new concept, it has appeared in the literature since the 1980s. It could be defined as a way of maintaining rural areas by diversifying the rural economy, which leads to improved quality of life in rural areas. The objective of rural development would be to avoid the migration of the population from rural to urban areas and at the same time to try to use natural resources in other economic sectors. The concept of the EU's agricultural policy has been mentioned since 1957, in the Treaty of Rome, because the economies of the six states were predominantly agricultural, and food security was a priority both today and abroad. Thus, in 1962, the Common Agricultural Policy of the European Union came into force. According to Marius Profireoiu, the following arguments were based on the PAC other:

- "Agricultural activity cannot be compared to other economic activities. Production in this domain comes from several sectors and depends on climatic influences."
- The difficulties encountered in trying to balance agricultural production, in collaboration with the constant demand for food, could lead to large price fluctuations within the Union, if it did not require measures to regulate the market.
- „50% of the EU population lives in rural areas, which represents 80% of the territory of the community."

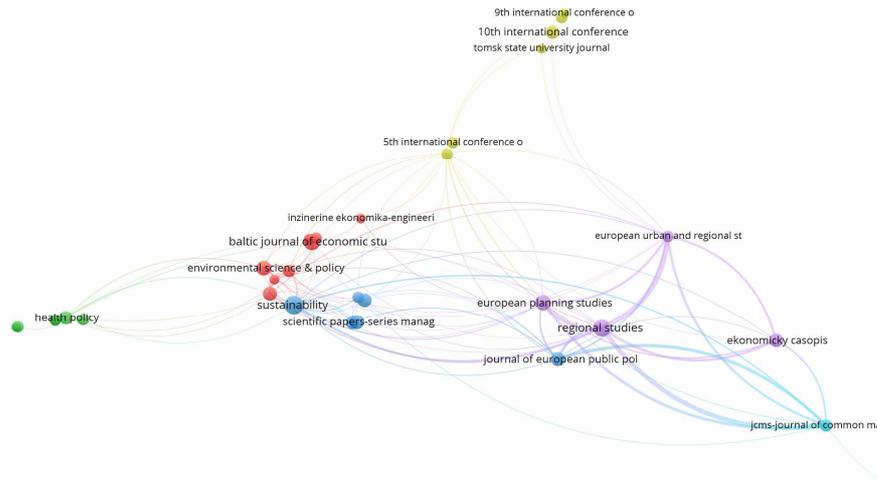
Rural development policy is currently the second pillar of the PAC, and currently plays a very important role in solving the problems facing the "school". Strengthening rural development policy is a priority for the EU, as it seeks to stimulate job creation in rural areas, improve the quality of life in rural areas and create rewards for sustainable development.

## **3. Bibliometric analysis, methods and results**

For this part, we focus on existing research both nationally and internationally, conducted by specialists. We will also refer to the contribution made to the specialized literature through the bibliometric analysis on this topic. Starting from the bibliometric analysis, we will move on to the detailed analysis of the specialized literature.

At the same time, the information provided reveals a way for us to visualize the results as clearly as possible in the form of scientific maps. Through this analysis we test the quantitative aspects of the information.

Figure 1 highlights the frequency of publication in various specialized journals. The selection for the graphic presentation was made for the countries that have a frequency greater than or equal to Figure 1 highlights the frequency of publication in various specialized journals. The selection for the graphic presentation was made for countries with a frequency greater than or equal to 15 in the number of publications on this topic. In the following we will present the bibliometric analysis based on the use of the similarity method for the creation of scientific maps. These are a symbolic representation of the scientific fields, in which the elements presented on the map are associated with subjects or themes. To make these maps, I used the VOSviewer program. This software processes data downloaded from the Web of Science



**Figure 1: Journals**

Source: Web of Science's own database processing

Figure 2 is a view of the clusters of publications that contain the keywords by which the articles were searched. Keyword analysis helps the author to obtain information about factors related to the problem of tax evasion. The size of the circle represents the weight, the larger the circle, the heavier it is. The color of the circles determines the cluster to which the keyword belongs. The correlation between the keyword and the other terms is reflected by the distance between the circles. The closer the keyword is to the terms, the stronger the relationship.



#### **4. Conclusion**

European funds are those financial instruments created by the European Union, for Romania (and not only; Romania is not the only European state that benefits from these instruments), the private and/ or public segment, to develop certain areas and support the member countries to achieve certain standards of development, both economic and social/ cultural.

Most of the European financial allocations for Romania represent funds made available for investments in regional development, more precisely to those projects that allow us to reduce the development gap compared to other European countries.

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## SUSTAINABLE DEVELOPMENT: A CURRENT CONCEPT

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**Abstract:** *For a relatively short time, mankind has begun to be aware of the consequences of the activities on the planet and, implicitly, on itself. Numerous alarm signals have been raised by many environmental agencies, organizations, environmentalists, the press, etc. As a result, international political and scientific debates began to be organized in order to find the best solutions. As a result, the concept of sustainable development was born, which is today widely invoked in all countries of the world, at the highest levels. In 1987, the Brundtland Commission drafted and published the document "Our Common Future" (The Brundtland Report). The Commission's report, presented in 1987 by Gro Harlem Brundtland, provided the first (and the most cited) definition of sustainable development: "sustainable development is the development that seeks to meet the needs of the present without compromising the ability of future generations to meet their own needs." Another definition combines socio-economic aspects with those of resource exploitation: "sustainable development refers to all forms and methods of socio-economic development that focus primarily on ensuring a balance between social, economic and environmental aspects and elements of natural capital" (Ucu, 2013).*

**Keywords:** sustainable development, economy, sustainability, environment

**JEL classification:** Q01

### 1. Introduction

The appearance and development of the human being was the event that introduced new and powerful changes on the planet. While plants and animals have adapted to the conditions offered by the environment, man has imposed his will and intelligence, adapting or transforming the environment to his needs. In the long prehistoric period, human interventions on nature did not exceed a certain limit, which has its own capacity for recovery. The relationship between man and the environment was harmonious. The appearance of agriculture made possible the rapid increase of the population. Human settlements were getting bigger and bigger. Deforestation, burning of vegetation and clearing of agricultural land began. The agricultural revolution is the first major event in human history in terms of impact on Earth. The development of industrial civilization was another stage in the history of mankind, which led to a great technological progress, and implicitly, to a great increase of the population, but accompanied by the widest actions on the environment. In this era, new problems appeared, such as: pollution, the extinction of some plant and animal species, the depletion of some natural resources, global warming, etc. The Industrial Revolution is the second great event in the history of mankind, which has generated far-reaching changes in the environment (Marinescu, 1996).

## **2. The global context that led to the appearance of the concept of sustainable development**

Man did not long question the consequences of his actions. For him, nature was indestructible and inexhaustible. And it really was as long as the people were not very numerous. History has shown us that there is a close connection between the number of people and the state of the environment in which they live. With the increase of the population, the degradation of the environment became more and more evident for man, who began to understand that it could be a factor of destruction of his own house. From this conclusion was born the idea of protection and conservation of nature. The idea of protecting nature is very old. We have had writings since antiquity that talk about caring for certain elements of the natural environment. And in the medieval period there were concerns of kings or nobles for the protection of landscapes and animals. However, the implications of states for regulating the relationship between man and nature internally were extremely few. Internationally, the protection of representative areas of the biosphere is usually linked to the generation of the last hundred years. If caring for the environment has a long tradition, certainly not as nowadays, concerns about equity and social justice have been rarely mentioned throughout history. After World War II, economic and social problems began to play a key role in the political agenda of states. All governments had as a priority the economic development or, more specifically, raising the living standards of the population. To achieve this global goal, a race of economic development has begun, supported by an overexploitation of the resources. In the context of continuous globalization, reflected in the permanent increase of information capacity, our planet has become smaller and smaller. As a result, more and more people have started receiving information about: climate change, depletion of resources, uncontrolled deforestation and habitat destruction, droughts, floods, hurricanes, waste, population increase, poverty, air and water pollution, intensive fishing, etc. The deteriorating health of the planet has become the main topic of debates. Policy makers have understood that the much-desired economic development came with extensive environmental degradation. Without a control over the exploitation of resources and the degradation of the environment, all achievements of economic development were in vain, moreover, the quality of life was affected. Realizing the consequences of such an approach, politicians and specialists in the field have sought a balanced way so that economic and social development must not take place in parallel with environmental degradation. Thus began the organization of international conferences, generally organized under the auspices of the UNO, which discussed the main issues of humanity. The issue of environmental degradation has become a political or institutional one by dealing with it in environmental reports and conferences, program adoptions, strategies and decisions of international commissions and bodies. Within them, it was decided that all issues should be addressed through collective measures at the global level. Humanity had to find a way to live on Earth that harmoniously combined economic development, environmental protection, and social equity. These three elements would form the basis of the concept of sustainable development, as we know it today.

### **3. The triangle of sustainable development**

The origin of the concept of sustainable development is found in English, where the terms sustainability, sustainable and sustainable development are used. They come from the Latin "up" and "hold" which means to support, to keep, used hundreds of years ago (Bîc, 2013). Mahon Munasinghe is one of the well-known researchers in sustainable development. He has created the triangle of sustainable development that comprises three elements, which are in close interdependence:

- Economic - maximizing income provided that the capital stock is kept constant or increased;
- Social - maintaining the stability of social and cultural systems;
- Ecological - maintaining the resilience and robustness of biological systems.

According to Munasinghe (Bîc, 2013), without a strong and healthy economy, unemployment is high and the authorities do not have the resources to fight social problems. Also, if the environment is not diverse and rich, the resources the economy needs are depleted. As a consequence, the health of the population is endangered, with the risk that the economy would no longer benefit from employees. The economic component is the basis of economic progress, which is the willingness to pay for goods and services consumed. In all states, economic policies aim to increase GDP, leading to increased production and consumption. In order to develop a sustainable economy, it is necessary to maximize the incomes, but internal and global uncertainty raises certain difficulties in finding efficient ways of development. In terms of development, the environmental component has been taken into account for a relatively short time and has arisen from the need to rationally manage depletable resources in the context in which human well-being is also based on ecological services. Most experts admit that environmental policies and funds are dependent on economic development. An additional measure on the environment is the establishment of national and international institutions to regulate the economy according to the principles of sustainable development. Proponents of demographic policies, as a means of defending the planet, consider the population increase as being the main cause of environmental degradation and thus social problems. Environmental sustainability means the normal functioning and preservation of the viability and balance of natural systems. The irrational exploitation of natural resources, the pollution and the extinction of some plant and animal species, determine the decrease of the resistance and the increase of the vulnerability of the systems. Sustainable development also means preserving biodiversity, not just the sustainable progress of the socio-economic system. The social component refers to the improvement of individual well-being, as well as of society as a whole, which results from the increase of social capital. Munasinghe considers social capital an important resource. The social dimension includes strategies to protect, reduce vulnerability, improve equity and ensure that people's basic needs are met. The quantity and quality of social interactions (common social values and norms) underline the existence and development of human society. Social development also means the eradication of poverty. There are large disparities in the income of the population. Equity is a concept with a strong social character, which is based on the correctness of decision-making processes. John Elkington is an authority on sustainable development. He has provided solutions to the business environment to become sustainable. One of the concepts invented by Elkington is the triple bottom line, which emphasizes that all companies must take into account not only economic prosperity, but also the state of people and the

environment. A company must not only be an economic-financial entity, but also a social-ecological one. The reports must include, in addition to the financial achievements, those related to the social and environmental impact. Companies need to be more responsible. In response, some organizations have adopted the TBL framework to assess their performance in a broader perspective and to give greater business value (Elkington, 1997). People, social equity or human capital are based on fair and beneficial business practices for the workforce and the community and region in which a corporation operates. A TBL company designs a mutual social structure in which the well-being of corporate interests, the workforce and other stakeholders are interdependent. A TBL company strives to benefit as much as possible from the natural order or at least not to harm and minimize the impact on the environment. A TBL effort reduces its environmental footprint, among other things, by carefully managing its energy consumption and reducing manufacturing waste, as well as making waste less toxic before disposing of it safely and legally.

#### **4. The future of sustainable development**

Sustainable development addresses all aspects of life, from population increase, climate change and halting biodiversity loss under migration and employment among young people (Bic. 2013). There are many debates about the future of sustainable development in the context in which there are still states that are not in a hurry to apply the main principles of this concept. There are many obstacles to achieving the goal of becoming a sustainable society: population increase, economic crisis, terrorism, climate change, globalization. Just a few examples: the metallurgical industry cannot be conceived without that of coal, which is an eminently polluting resource; population increase in Asian countries is taking place in parallel with the destruction of unique habitats in order to gain new agricultural land; the export of polluting industries and of waste to other states will continue as long as there are no regulations in this regard. There are also many optimists about the future of sustainable development, but mentioning that it takes decades to achieve the goals set.

#### **5. Conclusion**

Sustainable development is the only solution that can give future generations the chance to live and achieve things in a healthy natural environment. It provides the necessary means for communities to use their resources efficiently, create efficient substructures, protect and improve their quality of life, and design new businesses for a stronger economy. Sustainable development for a strong economy requires that investments in human capital be equal to the economic ones of natural resources. Sustainable development has an economic, ecological and social dimension. All of these must work together. Economic, ecological and social sustainability can be achieved through political will (from the highest level to the local level), but especially through education. "Without an extraordinary and dramatic change, the most likely result of the current trajectory of industrial civilization is convulsion and collapse. Collapse does not mean a sudden and apocalyptic end, but an accelerated decline of the economic, social and ecological

environment over a generation or two... The result will be catastrophic in both human and ecological terms” (Atkinsson, 2006, p. 234).

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# THE EUROPEAN COMMON AGRICULTURAL POLICY DETERMINES THE LACK OF COMPETITIVENESS OF THE AGRI-BUSINESS SECTOR IN ROMANIA

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**Abstract:** *The integration of the Eastern European area into the European commercial, political and cultural space has been, and still is, a relatively slow and arduous process. The agricultural sector in Romania is one of contrasts; it can deliver record productions on certain crops but also has the lowest level of technological endowment of farms from the EU block. In addition, the labour crisis threatens to stagnate the sector, despite the absorption of money from the EU. Absorption, however, is not equal to implementation of sustainable and competitiveness. Economic operators in the agricultural sector are characterised by a strong state of heterogeneity, poor financial health and massive dependence on direct payments. The biggest representation here are from the SME's (approximately 90%). Most farms have private owners (87%) and the entrepreneurship in the field does not have a long history, about 60% of companies were set up in the last 10 years.*

**Keywords:** Common Agricultural Policy; European Agricultural Guarantee Fund; Competitiveness; Analysis of performance indicators; Multi-functionality in agriculture.

**JEL classification:** O11; O13; P25; Q01; Q14; Q18;

## 1. Introduction and Background

Agriculture is a strategic sector of the Romanian economy. It has a share of more than 5% of GDP and more than 20% of the Romanian population works in this field. This indicator puts Romania first in the EU (NIS, 2019). Turnover of firms, operating in agriculture, increased in 2019 with one billion euro, compared to the previous year, reaching a total of 43.5 billion euros (Keysfin, 2019). However, investments financed by the EAFRD (European Agricultural Fund for Rural Development) or payments from the EAGF (European Agricultural Guarantee Fund) does not cover the need for protection against natural disasters. At the same time, Romanian farmers do not implement modern technologies to monitor and protect agricultural crops, relying their profitability only on subsidies. The farms lack of modern technology and the record number of small farms (subsistence) prevents the sector from becoming a real competitor within the Single Market. Agriculture is the economic sector that attracted the most EU funds. However, from the total of 26 billion euros (from 2001), over 65% are direct payments for farms. The money attracted by agriculture is the most important part of European funds invested in Romania. In addition, this money has undoubtedly led to the development of the

sector. Nevertheless, the development is incorrect and vulnerable. The CAP should be supportive with investment projects, a change in the balance sheet between the two pillars would lead to an area of competitiveness. Careful monitoring of grants and a more efficient analysis of the competitiveness of business plans will increase the export capacity of value-added products. In addition, a better market orientation and modernization could create more competitiveness.

## **2. Integration and Competitiveness**

Plant production has increased by 26% in the last five years, reaching 13.9 billion euro, ranking sixth in the EU. According to the Romanian National Institute of Statistics, in 2018, Romania was the first producer of corn, among the states of the European Union, both in terms of cultivated area and of production achieved, which was 18.7 million tons. Romania also holds 7.3% of the total EU wheat production (10.1 million tonnes), taking the third place, after France and Germany. In terms of soybean cultivation, we rank second, in terms of both cultivated areas and production, achieving over 16% of the total production of the EU.

The size of Romanian farms is another area in which the agricultural paradigm exists, outside the reality of Western Europe. The first purpose of the Common Agricultural Policy was to support family farms, farms that work the land and live from what they produce, but without sending products into the economic circuit. The problems of the CAP have become even more obvious, especially for farmers in countries such as Romania. Subsistence farms are farms that produce only for their own consumption and do not sell their products regularly. Semi-subsistence farms, on the other hand, are farms that produce mainly for their own consumption, but also sell a certain part of the production in the market with a certain regularity and consistency (Giurcă, D. 2008). The size of the farms can be measured by the area used, the economic size or market share, but the overall measurement is according to the European standard, SO (standard output). According to Eurostat, 71% of Romanian farms are subsistence farms, and cover 26.7% of the utilized agricultural area of the country (Giurcă, D. 2008). The European system of direct payments distorts competitiveness and creates production inflation. Another problem is that Romania depends on imports for supplying food (Dachin, A. 2008), lacking the functional agro-food distribution chains. Romania also exports large quantities of raw materials and imports about 70% of consumer foods, additional transportation costs do even more expensive food than in the rest of the EU. It is also very difficult for the small farmers to enter the process, because large external processors are not interested in small amounts of productions that can vary in quality and quantity. A solution could be shortening as much as possible the distance from the raw material to the processed product (Burja, V. 2008). This is extremely important to ensure jobs in the rural area, building a sustainable economy based on agriculture and assuring the optimally distribution of labour. In 2009, Romania was the fifth largest agricultural producer in the European Union and yet it imported agricultural products worth 3.7 billion euros (Alexandri, C. and Luca, L. 2008). The budget deficit for 2019 registered an annual increase of 1.8 percentage points (up to 4.6% of GDP), while the current account deficit widened in the first 3 quarters from 2019, reaching 5% of GDP (from 3.9% in Q3 / 2018 - Chart IV.1). From the balance deficit trade, of about 16.5 billion euros in June 2019 (7.8% of GDP), approx. 4 billion euros (1.9% of GDP) is generated by the food industry.

Trade with cereals counter balanced the evolution, where there has been an improvement in the balance from around 1.6 billion in 2013 to 1.8 billion euros in 2018. The situation of the dynamics of the trade balance with agricultural goods are in line with the general current account and balance of goods. Thus, the balance of goods was in the deficit area throughout the analysed period, showing significant and continuous damage since 2015. At the same time, Eurostat data places Romania on the last place in the EU, in terms of expenditures for research and development (0.5% of GDP, compared to an EU average of 2.1% in 2017). Although the trend was increasing at European level (increase from 1.8% in 2007), in Romania the evolution was reversed. The underfunding that agriculture in Romania has faced has been affecting the agricultural research sector, the institutes losing both human resources and important land areas.

The Common Agricultural Policy is still the sector that consumes the most from the annual budget of the European Union (Davidova, S. 2014). Although the percentage of the CAP is declining the percentage of the total budget, from over 93% in 1970 to below 43% in 2015, remains undoubtedly the most debated policy. Extremely tendering amounts offered through EAFRD and The EAGF is an end in itself for absorption, an area in the Member States appreciates more quantitative rather than qualitative impact of the policy. Undoubtedly, quantity matters, the infusion of capital, in national economies, provides a guaranteed percentage of GDP. However, in this case, the quantity is not assured by qualitative objectives, an area empirical analysis of economic indicators that draw attention to the fact that although the absorption is high, its contribution to Romania's GDP tends to upset the trade balance and has increased the annual import rate. The trade deficit with food products reached 4.2 billion lei, in November 2019, doubling in the last five years. Overall, the trade balance with products has become a vulnerability of at least two reasons: the existence of a close relationship between the deterioration of the current account deficit and the balance of payments and the need to ensure food security (Romanian National Bank 2019).

Hayami, Y. and Ruttan, V. W. believe that agricultural policy must guarantee the process of growth and the maintenance of economic equilibrium. At the same time, agriculture does not generate enough domestic political power to trigger the development process. The exclusivity of the CAP, the two consider, makes it possible to ensure progress through its repetitive nature (Hayami, Y. and Ruttan, V. W. 1985). Keeler, J. T. S. (1987) point out that the interventionist character of the CAP, drove the interests in the food industry. The ability to change markets and define interests have made the CAP a hegemony in agriculture, an institution that is becoming stronger with each new Treaty or multiannual financial framework.

### **3. Conclusion**

In context of the proposals for the future CAP 2021 - 2027, then paper is trying to emphasize a number of measures that have the potential to help states like Romania avoid the trap of lack of competitiveness absorption. As part of a revolutionary reform, the CAP could turn into a policy regionalized, adapted to the real needs of the direct beneficiaries through the development of different objectives depending on the actual absorption needs of the area. Thus, direct payments should be adapted to real economic indicators, where production takes into account demand and storage capacity, in the absence of a competitive

European system of collection and storage, export of raw materials at prices below the marginal cost of production threatens the economic stability of the area. Introduction of an amount monitoring system granted directly to farmers and the application of possible conditions for use after receipt, the level of benefit in the economy would increase. The solution could be the introduction of a maximum amount per beneficiary that would help a better scattering of sums and encouraging subsistence farms to associate. Introducing a new type of coupled support for farmers who have chosen to capitalize their production, could reduce the number of subsistence farms and would increase competitiveness. A reformed policy into a flexible and regional policy could give the Member States decision-making capacity on the budget available through the CAP. A change in the balance between the two pillars of CAP would lead to an area of competitiveness assumed by financing contracts.

Careful monitoring of grants and a more efficient analysis of the competitiveness of the business plans will increase the export capacity of value-added products. It is necessary to find a system for measuring the percentage of non-reimbursable financing from the total annual turnover of farms. This percentage could be a relevant indicator for the economic impact of the policy. Such a system would provide more transparency to the policy and would constitute relevant analytical data for future reforms. I reiterate that, in Romania, between 2007 and 2019, 11.1 billion euro were paid to beneficiaries eligible under the single area payment scheme. Analysing the data provided by the ministry of agriculture, 2% of the total amount went into the accounts of less than 0.001% of the beneficiary farmers. In the last 5 years, only one farm collected valuable funds of over 26 million euros.

An analysis submitted to the European Commission by the European Court of Audit proposes the introduction of a new performance indicator, a stronger subsidy for farms from the risk categories, operating in sectors in difficulty. Therefore, area payments and coupled support need to meet competitiveness requirements, sustainability and quality better than at present. Numerous studies have investigated how many farms would survive bankruptcy in the absence of CAP payments. The results are relevant to the description of the lack of viability of large farms, but hampered by the argument of productivity that ensures the fulfilment of the food security objective on the continent.

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## **SOCIAL IMPACTS OF PERFORMANCE MANAGEMENT IN THE PUBLIC SECTOR**

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**Abstract:** *The focus of this article is on the evaluation of public service performance. Nowadays, social innovation activities also play a significant role, as every public service company wants to provide a service that meets the expectations of society and implements developments that represent public interest. I consider it important to present and examine this area in detail. The present research shows that performance management is an important element of performance management and that society needs well-developed systems.*

**Keywords:** Performance Management, Public Sector, Social Innovation, Healthcare, Balanced Scorecard.

**JEL Classification:** H3, L25, L32, M10

### **1. Introduction**

Health is a basic condition of a person's life, affecting family, work and many factors that can be linked to the levels of Maslow's pyramid. The development of health systems has always been one of the important tasks, to maintain social balance in a market economy, a social welfare network providing a minimum standard of living and access to basic health services for all members of society (Karner, 2005). It is closely related that all nations make sure that there are appropriate health care facilities in each country and that patients receive appropriate care. Article 38 (5) of Hungary's Fundamental Law describes the management requirements for public service organizations (local and municipal-owned entities). This paragraph reads as follows: "State-owned and local government-owned business organizations operate independently and responsibly, as defined by law, following the requirements of legality, expediency, and effectiveness." (Basic Law 38, Paragraph 5). There are three key terms in this paragraph that are closely related to the need to implement and improve performance management systems: legality, expediency, and effectiveness. These are the three criteria that must be taken into account when implementing a system or regulating processes and must be met at the highest possible level. To achieve the best possible compliance, it is worth clarifying these definitions.

- Legitimacy: the interpretation of jurisprudence is the enforcement of laws by all state authorities and citizens (Act L of 2013).
- Expediency: The feature of an object or device to reach its intended purpose (Hungarian Language Dictionary).
- Effectiveness: We use the available resources efficiently without wasting time and money (Lannert 2004).

All in all, it is important to keep these concepts in mind and to implement a framework that is consistent with the concepts mentioned above. Healthcare is a priority area worldwide, and significant issues of care and funding are raised in this area. Lack of financial resources is also a problem in poor regions, but every area needs a well-balanced institutional system, so performance management and resources must be concentrated.

## 2. Features of performance management in the public sector

Similarly, it was mentioned in the introduction that all organizations should have performance management, so health care institutions are no exception. This section presents the specifics of the public sector and the elements that need special attention. During the literature review, it was of primary importance that to have an effectively working performance management system a target hierarchy had to be set up, that is to identify the main goals to focus on. This hierarchy facilitates a health care institution to function effectively while helping to build and develop a well-functioning performance management system. However, it was necessary to use a model to set up the priority. In the literature research, I was looking for a model that builds on learning cycles, since the key to organizational development is learning and change, so the 5E model was selected.

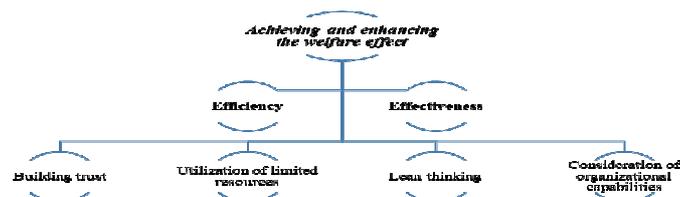
This model proved to be a good choice, as it is logical to follow which steps serve what and through which activities can be achieved. It seems necessary to present the elements of this model so Table 1 was prepared for this purpose.

**Table 1:** 5E Model

5 E Phases	Aim of the phase
Engagement	Asking questions why the activity is important.
Exploration	Results of feedback and consultations
Explanation	Use facts and data
Extension	Developing collaborations, tasks
Evaluation	Summary of results

Source: Bybee, WISD

The goals, that a hospital needs to achieve to perform better and the elements that need more attention have been developed based on the 5E model. Based on these, Figure 1 illustrates the target hierarchy which has three levels. The main target is worth breaking down into secondary targets that will help to achieve it easier. The utilization of the model's element is not incidental, and it will be discussed after the illustration of the developed target hierarchy.



**Figure 1:** Possible target hierarchy for public service companies

Source: Own edition based on Kocziszky and Veresné, 2016

As a top priority, the 'Wellbeing Impact' at the top of the figure was identified, as in a public service organization the primary target is to provide the highest level of service and to ensure service to every member of the society. With other words that means to provide adequate health and recovery services, so the performance management system should also prioritize this. (Kocziszky and Veresné 2016) On the second level, efficiency and effectiveness are at the forefront, and it is necessary to define these concepts also.

- Effectiveness: the extent to which the target organization achieved its objectives. (Gajduscsek 2011)

- Efficiency: the cost of achieving results. It is more efficient for an activity or organization to achieve higher results at the same expense or to achieve the same results at a lower expense. Expenses and results (inputs and outputs) are defined for the public sector. There are cases where it can be quantified in physical quantities, for instance, the number of patients treated - the number of hours worked (Gajduscsek 2011).

The targets in the second level need to be further broken down, so the third level contains elements that contribute to the higher-level targets mentioned above. The target hierarchy developed at the beginning of my research is constantly being extended, so in this study, a new element is introduced, as the new focus points showed by 5 E model:

Utilization of limited resources: this is a deliberate expression of a limited-term because, in the case of a public service organization, both financial, human and tangible assets are limited. A good example of this is the health sector, where hospitals have a cost control system and therefore have limited financial resources within specific facilities. It is also worth noting that profit maximization is not the ultimate goal in this sector, but as due to public finance, managers must focus on an efficient and economic operation (Csath 2016).

Raising the service level standard: we are talking about a public service organization and one of the features is that its customer base is not just a certain segment of the population, but in some way, almost everyone comes into contact with this type of organizations.

Developing a lean approach or process approach: As the organizational structure also shows that it is not a simple one-line organization, care must be taken to coordinate and develop processes. The lean approach focuses on the loss-free operation of services. There is a large body of international literature on good health practice in this area (Molnár, Kerchner 2016).

Utilizing organizational capabilities: As performance management systems focus on these elements, this should be given high priority, as it is important for defining the vision and for achieving the targets defined in the first two levels.

Building trust in the life of a hospital is also important, as it is important for the institution to return patients not only because it is free of charge or need, but because their trust in both professionals and the institution justifies it.

Every organization should have a strategy, so when it comes to leadership, this is the primary task. There are differences between sectors as they have different values and management. Here I could connect and illustrate the 5 E model I mentioned earlier as a good basis, as it helps to build a process that follows each activity and how activities contribute to the main target. Logically presents the connection points and build the targets on top of each other. However, the implementation, development and, of course, application of the performance

management system are closely linked to the achievement and tracking of targets. During the research, I examined and collected performance models that are primarily used in the public sector and have novelty content.

### 3. Conclusion

The present article introduces results that facilitate the development of a unified system of indicators that can be applied effectively in the performance management of public service organizations. It is worth choosing a system that supports the targets formulated in the target hierarchy. In the examined institutions, Balanced Scorecard-based performance management is applied, which is good because it puts the organizational strategy in focus. During in-depth interviews with managers, it has also found out that there are factors that the model ignores. Comparing this information, there is a strong link between the outlined target hierarchy and the implementation of the BSC system since the introduction of this system will provide a more efficient service. The lean approach helps to design processes and reduce process times, and also supports the utilization of organizational capabilities and the management of limited resources.

Health is important for everyone, so the role of health care institutions is paramount. As all state institutions are bound by state rules, they are not in an easy situation, but a unified performance management system that is tailored to specifics can ease this situation.

### 4. Acknowledgements

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## **PARTICULARITIES OF ASSETS MANAGED IN THE FIELD OF PUBLIC UTILITY SERVICES**

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**Abstract:** *This article presents a short foray into the scientific specialized literature regarding the concept of public and private patrimony of the state in Romania. The article presents the fund for the maintenance, replacement, development of public utility systems, the advantages of setting up and current inconsistencies, as well as proposals for improvement. Through the performed research, by using the method of observation and the analysis of the documents, we have drawn the conclusion that: the mandatory existence of the maintenance fund, replacement, development in all areas of public utility (not only optional or those who accessed projects with grants), the level of inter-community development associations (not an operator or territorial administrative unit), would have beneficial effects both for correlating legal regulations and for correlating national ones with those of the European Union, as well as for ensuring the conditions for accessing new expansion, development and modernization for all types of public utility services.*

**Keywords:** public patrimony, public utilities system, royalty, development replacement maintenance fund, public utility service

**JEL classification:** K11, L32, L97

### **1. Introduction**

Romania has made continuous efforts, both in the pre-accession period and as an EU member state, to align with Community legislation in the field of public utilities and its financing modalities. Legislative changes have had an impact on both the architecture of the organization and functioning system of public utility services, as well as on the assets managed by the entities in the field. The topical issue of the theme is given by the need to continue investing in public utility systems in order to achieve the objectives assumed by Romania in terms of environmental and quality requirements. of this fund ensures the significant reduction of the operating risk in the field of public utilities services, as defined in Law no. 100/2016 (demand risk and supply risk) and this is because the operating expenses are not burdened by maintenance, replacement, the development of the public utility system, they being pursued separately by a separate chapter of the investment plan. Equally important is the fact that from the point of view of cash flow, the source of financing for the maintenance, replacement, development of the public utility system is the special reserve fund set up for this purpose. The establishment of the fund in all sectors of public utility services, at the level of inter-community development associations would allow the unitary implementation of the Multiannual Development Plan of community public utility services, respectively of the National Development Plan

with the requirements of the treaties and financing memoranda of the European Commission, from a financial, accounting and fiscal point of view, having as direct effect the elimination of operating subsidies as well as ensuring transparency in the activity of accounting and reporting at all levels.

## **2. Particularities of assets managed in the field of public utility services**

Regardless of the nature of the public utility service, the service sums up the set of activities of general interest performed by service operators, in the interest of a community, using public goods for a limited period of time, so that material resources, human or financial, are transformed in public utility services of the best quality and maximum utility. Therefore, the system of public utilities, represents the set of movable and immovable goods, acquired according to law, consisting of land, buildings, constructions and technological installations, equipment and functional endowments, specific to a public utility service, through which operation and operation is ensured / service provision. The goods that make up the public utility systems are part of the public or private domain of the administrative-territorial units and are subject to the legal regime of public or private property, according to the law. The set of public utility systems intended for the provision / provision of public utility services forms the technical-municipal infrastructure (Law 225/2016 updated).

It is noteworthy the fundamental difference between the two notions, respectively: the public utility system is a set of goods, so it has a material content, while the public utility service is usually the set of activities of general interest for residents of a community, operating with the goods from the public utility system.

Law no. 15/1990 on the reorganization of state economic units as autonomous companies and companies, contains regulations regarding the patrimony of autonomous companies and companies with state capital, stating that this regulation did not distinguish between the legal regime of public goods and private domain assets transferred to these entities, the own capital including the public domain of the state Law no. 18/1991 was the first normative act that established the general criteria according to which goods can be classified as goods as part of the public domain with the specific legal regime and goods as part of the private domain with a common law legal regime. The delimitation between the public property and the private property is made by the Romanian Constitution through article 136 paragraph 1: "the property is public or private". Regarding the public property in the Constitution, in article 136, paragraph 2, it is specified: "Public property is guaranteed and protected by law and belongs to the state or territorial administrative units". The Constitution does not stop only at defining the public property, but through the provisions of article 136, paragraph 3 also highlights the goods that are exclusively the object of public property. We note, therefore, that the term public property in Article 136 paragraphs 1 and 2 of the Romanian Constitution refers to both the public and private domain of the state, while the provisions of Article 136 paragraphs 3 and 4 refer only to the public domain. the private property of the state is defined, the custom as a consequence is, the property that is not public, is private.

Law no. 213/1998 is the normative act which on the one hand makes special reference to the criteria according to which the goods can be identified as being part of the public domain, including an exemplary sequence of these goods, and on

the other hand. also clarified regarding the property right over the patrimony goods, including the real estates transferred from the patrimony of the administrative-territorial units to the patrimony of the autonomous utilities and the commercial companies of local interest established by decisions of the county, municipal or communal bodies.

The entry into force of Law no. 213/1998 on public property and its legal regime, did not involve the reorganization of autonomous utilities and companies, but restructured their assets in the sense that from the assets of autonomous utilities and companies with state capital, regardless of whether they are of national interest or of local interest, the real estate that belonged according to the declaration of the public domain law was removed.

The national legislation on public and private patrimony of the state remains unchanged until the Emergency Ordinance no. 57/2019 on the Administrative Code, which brings an update, an alignment of the national legislation to the requirements assumed by the agreements with the European Union. Also, the Administrative Code through its content sums up several regulations in the field, in one, found in Part V Specific rules on public and private property of the state or administrative-territorial units. It stipulates the principles of the public property right, defines the notions used, brings clarifications related to the financial-accounting records regarding the public property and its inventory, clarifies the ways of exercising the public property right.

### **3. The development replacement and maintenance fund**

If the investment programs in the public utility systems of regional or zonal interest benefit from non-reimbursable financing from the European Union or from loans from external financial bodies, the operators or territorial administrative units, as the case may be, have the obligation to set up a reserve fund. intended for the maintenance, replacement and development of public utility systems or parts thereof, as well as for ensuring the funds necessary for the payment of the public debt service related to the co-financing of the projects in question.

The obligation to set up such a fund arose when the operators of public utility services accessed in the pre-accession period projects within the Municipal Utilities Development Program, on which occasion they signed loan agreements with the European Bank for Reconstruction and Development. In these loan agreements, the EBRD imposed a program of measures to improve financial and operational performance, the main conditions of which were: increase in tariffs for public utilities, debt service coverage through cash flow; control of customer debts, control of production costs and establishment of the I.I.D Fund (maintenance, replacement, development). As the existence of this fund proved its usefulness in daily practice, but also because the process of redirecting European funds to the aspects of economic and social cohesion in the context of Romania's accession to the European Union continued, the need to create a legal framework. This is all the more so as there has been legislation since 2003 that the financing treaties and memoranda between the Romanian Government and the European Commission enter into force on the date of their signing, without the need to go through their ratification procedure (Law no. 590/2003 on treaties). Considering that the rules and procedures of the European Commission, imposed as a way of working to the entities that accessed these non-reimbursable funds, but not assumed by the

Romanian Government, led to a series of discrepancies with the financial-accounting rules generally applicable in Romania, the legislator approves 2005 Emergency Ordinance no. 1988 on the establishment, supply and use of the Maintenance, Replacement and Development Fund for public service infrastructure development projects that benefit from non-reimbursable financial assistance from the European Union. The purpose of the existence of this fund remains essentially identical to the one provided by the loan agreements, respectively to ensure the necessary sources to cover the public debt service, as well as to ensure the continuity in the operation of the public utility services. The emergency ordinance regulates the minimum obligations of the operator or administrative-territorial unit regarding the establishment of the IID Fund, allowing the modification according to the concrete conditions of the projects and the requirements of the financiers, but limits the initiation competence at the Ministry of Public Finance (GEO no.198 / 2005, updated). Specific to this reserve fund is the fact that it stipulates the obligation that the cash related to the IID Fund be kept in a separate interest-bearing account, opened at a unit of the state treasury, or at a commercial bank, and this in order to comply with the provisions on order priorities in use, as follows: payment of government and local public debt service, payment of ineligible expenses related to projects receiving non-reimbursable technical assistance from the European Union, expenses for maintenance, replacement and development of assets under administration or concession, including those developed with non-reimbursable financing from the European Union, payment of VAT related to works and assets carried out with non-reimbursable financing from the European Union, payment of co-financing of projects receiving non-reimbursable financial assistance (GEO no. 198/2005, updated).

The holder of the IID Fund may be the administrative-territorial unit or the operator receiving non-reimbursable financial assistance from the European Union, but both entities have the obligation to fund the IID Fund as provided from the signing of the financing memorandum or loan agreement. of investment. The contribution is at least equal to: the royalty related to the concessioned goods, the profit tax paid by the operator to the administrative-territorial unit; cash and cash equivalents, amounts from undistributed net profit, respectively dividends made, VAT paid from the IID Fund and subsequently recovered from the state budget, other own sources of the operator (if applicable).

Although the provisions regarding the IID Fund have undergone permanent changes and completions, with all the advantages they present, the obligation to set up was not regulated for all public utilities, being mandatory only for those who accessed projects with non-reimbursable financing. Also, the lack of funds makes the royalty to be considered as income for owners, thus losing the purpose, according to which the royalty is a source of financing for future investment works in the public utilities system, an important goal given the permanent nature and regime of continuous operation of public utility services. (Emergency Ordinance no. 57/2019)

#### **4. Conclusions**

The short radiography of the public utilities services in Romania demonstrates the opportunity to set up the development replacement maintenance fund, this being a reliable source for ensuring the implementation of the National Strategy on

accelerating the development of community utilities, the Multiannual Plan for the development of community utilities, respectively National development plan. From this point of view, we emphasize the opportunity to set up the development replacement maintenance fund at the level of inter-community development associations, and not at the territorial operator or administrative unit, where the purpose for which it was set up is diluted.

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## THE COMPARATIVE ANALYSIS OF THE ENVIRONMENT FUND INCOMES AND EXPENDITURES

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**Abstract:** *Environmental problems have intensified in recent years. Due to the growing interest in sustainable development, governments and financial institutions have begun to structure and direct their resources to ensure environmental protection. From an economic point of view, several types of financial mechanisms and instruments have been created to support less developed countries. One of the most well-known methods of financing is through the Environmental Fund. In Romania it is managed by the Administration of the Environmental Fund, which is coordinated by the Ministry of Environment and Forests. we presented the conceptual approaches of this financing instrument. In order to demonstrate the importance of this fund in the economic and sustainable development of the country, we conducted a comparative analysis of the revenue and expenditure budget and presented their dynamics over time. In other words, we pointed out how the budget trend is influenced by the budget deficit or surplus. Last but not least, we emphasized the importance of taxes and duties that are subject to tax revenues. Therefore, the role of the environmental fund is essential for a harmonious and sustainable development of the country.*

**Keywords:** environmental fund, revenues and expenditures, tax revenues

**JEL classification:** Q50

### 1. Introduction

Europe has recently faced more and more environmental shortcomings. One solution to solve this problem was to create special investment funds. shortcomings. The purpose of these funds is to finance environmental programs and projects, but also to help the prosperous consolidation of the state budget. Thus, this environmental fund requires increased attention in terms of both revenue and expenditure. From this point of view in Romania, the official reports do not present an analysis of how it has progressed since its establishment. In this paper I have tried to show how this instrument has evolved in recent years and how it has been influenced by the budget deficit or surplus.

### 2. Literature review

The Environmental Fund can be said to have a relatively recent history. It was considered the foundation for an entity seen as a financial instrument to support developing countries' projects and programs to adapt to climate change, as well as

the start of the use of new technologies that make the transfer to a sustainable economy (Piana, 2010).

Regarding the definition of the green fund, there is no dogmatic approach. The United Nations has pointed out that if we must describe this concept, it is mandatory to establish that this type of funding is provided as an aid to developing countries who mitigate and adapt to climate change (Ministère de l'Environnement et du Développement Durable, 2018).

According to (Mathy, et al., 2015) the environmental fund, must be linked to the sustainable development, as well as a paradigm shift towards low-carbon and climate-resistant development trajectories. Another approach from (Antimiani, Constantini, Markandya, Paglialunga, & Sforza, 2017) is to present the environmental fund as a system through which developed bodies provide both financial and material support (resources) to the least developed or developing countries. In order to have a significant positive impact, (Müller, 2014) proposes for the efficiency of the results the division of burdens for setting a ceiling in terms of carbon emissions and their price. However, a balance must be created for the establishment of this environmental fund, considering both developed and developing countries. (Constantini, Sforza, & Zoli, 2016) considers that the benefits and costs of climate action depend on socio-economic size and geographical differences.

In Romania, environmental programs financed from national funds or own funds are managed by the Environment Fund Administration through the Environment Fund. Considered a public fund, the Environmental Fund was established by a special law that creates the public revenue destinations, which are part of the general consolidated budget (ADMINISTRAȚIA FONDULUI PENTRU MEDIU, 2020). Although it is the main institution providing financial support for the implementation of projects and programs for environmental protection, the Administration of the Environmental Fund addresses a wide range of beneficiaries. It was set up according to (European Commission, 2020) "polluter pays" and "producer responsibility" (Ministerul Mediului, Apelor și Pădurilor, 2020)

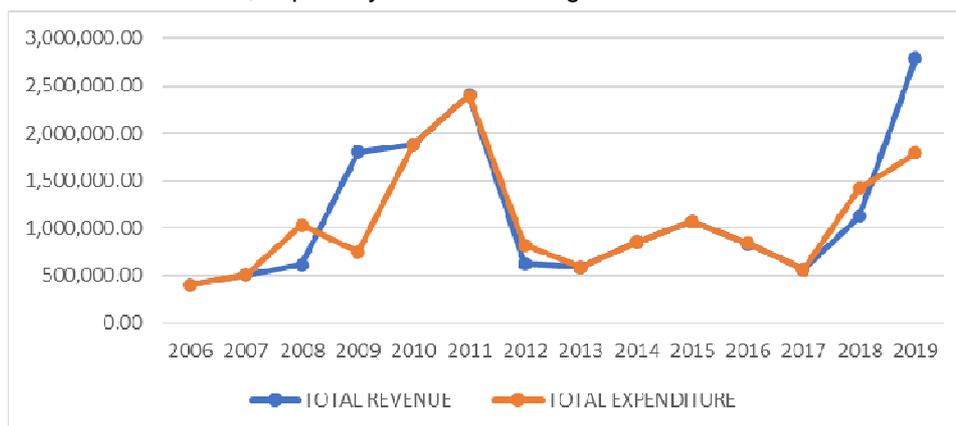
### **3. Evolution of Incomes and Expenditures of the Environmental Fund**

Recently, European Union countries have increasingly discussed the problems posed by tax reforms aimed at streamlining the use of natural resources and preserving their perishability.

The main purpose of this paper is to show through a comparative analysis how the environmental policy in Romania has been managed over the years through the Environmental Fund budget incomes and expenditures. The closest link between environmental programs and projects is an opportunity to coordinate financial resources and manage available materials.

The first graphic shows the dynamics of the revenue and expenditure budget of the Environment Fund. The data was taken from 2005 to 2019. Total budget revenues consist of current revenues (fiscal, non-fiscal), interest income and subsidies. At the same time, the total expenditures consist of current expenditures (budgetary and commitment), personal expenditures, goods and services, other transfers, other expenditures and capital expenditures. We also mention here the expenses with the projects with financing from non-reimbursable funds (FEN) post-

accession, with the social assistance and with the projects with financing from external non-reimbursable funds related to the financial framework 2014-2020. The highest incomes were registered in 2005 in the amount of 2,890,695,199 thousand lei, and the lowest incomes are found in 2006 in the amount of 401,468.11 thousand lei. Regarding the expenses, we have the highest records in 2015 of 2,890,695,199 thousand lei, and the lowest in 2006 also amounting to 401,468.11 thousand lei. The largest increase in revenues was noticed between 2018-2019, from 1,120,978 thousand lei to 2,792,592 thousand lei. At the opposite pole, the most sudden decrease can be observed between the years 2011-2012, from 2,401,703 thousand lei to 624,935 thousand lei. Although the ideal situation would be for revenues to exceed budget expenditures, there are no major differences between the two categories in the period under review. If between 2011-2013 we can notice a sharp decrease, starting with 2017 a significant increase is indicated, especially in terms of budget revenues.



**Figure 1:** Total revenue and expenditure budget of the Environment Fund  
 Source: own editing after data from (ADMINISTRAȚIA FONDULUI PENTRU MEDIU, 2020)

An important aspect to mention is that in the analysed period 2005-2019 in five years we have can notice a pronounced budget deficit, which has been reported over the years, to the detriment of the budget surplus recorded just in 2 years. In 2008 we have the first and largest budget deficit of 418,109.04 thousand lei, followed in the following year by an insufficiency amounting to 28,483.09 thousand lei. In 2011 we have the first budget surplus of 92,411 thousand lei, but in the following year a budget deficit of 200,000 lei is reported. However, the year 2019 registered a budget surplus of 1,004,203 thousand lei.

Following the evolution of budget revenues and expenditures, I consider that the Environmental Fund is one of the most important mechanisms for mobilizing them. In this sense, an important part of capital formation is given by taxes and duties. Given this fact, we considered it essential to present the evolution of tax revenues. In Romania, they consist of: taxes and fees on goods and services (Taxes on the use of goods, authorization to use goods or activities and the Environmental Stamp for motor vehicles) and other taxes and duties (Environmental Fund Administration, 2020). To highlight as much as possible, the evolution of the fiscal contribution, I want to point out the evolution of them from 2006 and until 2019. Starting with

2011, there is a sharp decrease that lasted 2 years. The highest fiscal revenues were recorded in 2011 in the amount of 2,325,707 thousand lei, respectively 1,783,489 thousand lei in 2010 and 1,785,770 thousand lei in 2009. At the opposite pole, the lowest incomes can be noticed in 2006 with 132,000 thousand lei, in 2007 with 139,000 thousand lei and in the year 146,470 thousand lei.

## 5. Conclusion

In conclusion, starting from the premise that green tax reforms aim to increase taxes on resource use and pollution, generating the use of funds received to reduce taxes on income tax, they will lead to improved use of natural resources and increase employment. In designing and implementing environmental policy, the state seeks to effectively influence the behaviour of individuals or companies. I believe that this type of policy can be implemented in a variety of ways. In this regard, I would suggest the adoption of normative acts on the regulation of activities that do not respect the environment. Regarding the encouragement of economic agents wishing to invest in actions for the development of the environmental sector. I would indicate the application for subsidies or grants. In fact, we can note that in recent years the number of sectoral programs has increased. Failure to comply with the legislative framework will increase the level of taxation of environmentally harmful activities over time.

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## BUSINESS ETHICS AND PERSUASIVE PRACTICES

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**Abstract:** *Business ethics, as persuasive communications and as an important tool in business, are interesting phenomenon's which needs to be studied, explained and understood. This paper aims to develop exploratory research to explain persuasive techniques influence in business ethics. As well to do an office research to explore concepts associated with code of ethics, persuasive techniques and due to these unprecedented circumstances of pandemic when fashion companies are forced to switch to online market, to test and develop theoretical approach of online fashion marketing, as well as its effects. Studying codes of ethics, business ethics and persuasive communication as a form of social influence, as well as fashion as a persuasive technique represent interest among marketers, as a notoriety topic, not enough studied. For better understanding of persuasive importance in business ethics and fashion as an inspiring or influential tool is effective to do an exploratory research of fashion role in persuasive communication and delimitation of persuasive techniques, also of code of ethics and business ethics worldwide. Since its beginning, persuasive effects was investigated in marketing applications, of the question of effects on behaviour, but less fashion as a technique of it. I set out to do an office study, for evaluating importance of colour in fashion techniques and for establishing of their efficiency or not in persuasive communication, as well as role of persuasive communication and codes of ethics worldwide. The implications and findings of this research suggest that fashion had an important role in society and may be defined as a tool of persuasion and also persuasion role in business ethics environment needs continued research. This paper helps to place this subject, in proper prospective and clarifies much of its important notions that have been studied only tangentially.*

**Keywords:** persuasive communication, Macromarketing, business ethics, fashion

**JEL Classification:** M31, M37, M390

### 1. Introduction

Persuasion represents a wider phenomenon and is about everything in business if it is used ethically and for the benefit of society. Persuasive practices can contribute to a higher appreciation, and can lay the foundations for a fruitful collaboration that requires high quality and transparent services. In this work we were motivated to set out an exploratory research in order to describe and explore ethics and persuasion in Macromarketing, also to analyze fashion as a persuasive tool. This field was studied tangentially over the years. This paper is one of the few

that examines the importance of persuasive practices, online fashion persuasion, codes of ethics worldwide and their marketing importance, in such an extensive theoretical research. This study brings a contribution to the scientific literature by extensive theoretical explanation and clarification of codes of ethics and its implementation in different countries, persuasive practices, fashion role in persuasion and their importance in Macromarketing, mainly in online. The impact of the unprecedented pandemic with the current social distance restrictions related to the pandemic has redirected companies, employees and consumers online. Based on this result of the paper, the main findings are that persuasive marketing and the fashion industry as a component of it, as well as business ethics in different countries, is a field studied tangentially, which requires more studies and research by marketers for elucidating consumer fear and become a well-studied and transparent domain.

## **2. Macromarketing and business ethics worldwide**

Marketing has been an important “catalyst” in the process of economic development. The universal nature of Macromarketing reflects the results of a “growing understanding” of the role of marketing in the development process. (Nason and White, 1981)

Macromarketing deals with the “aggregate marketing system” and everything that has its impacts on “economic development, quality of life, and other related issues”. (Wilkie and Moore, 2009)

### **2.1. Marketing in globalization era**

At the core of marketing are companies, with their actions and contacts, which delimit and implement their approach to the market, characterised by demand and competitors. Marketing offer company tools to manage “the value of their offer” for their clients and, at the same time, offer the “value of their clients” for themselves. (Addis and Podesa, 2005) The present time is represented by the ongoing process of globalization in the world economy. In this recent economic reality, multinational enterprises have become key players with their rapidly growing shares in world production, investment and trade flows. Cultural distance, in the majority of the estimated specifications, is not statistically significant. (Cieślak, 2020)

Due to the flood of information, the speed of business and new technologies, as well as “flatter organizational structures” lead to an increasing in the role of marketing researchers as a marketing decision making. This trend will develop a more “human-orientated” research methodology, as ethnography. Ethnography is seen as a tool that will be employed to understand “nascent and emerging consumer issues”. Currently, researches are facing a lack of research tools on nonverbal communication, emotion, “metaphor” and visual images. (Malhotra and Peterson, 2001)

### **2.2. Codes of Ethics**

Codes of ethics in a modern society are oriented towards “different levels of action” and can be effective in “balancing the competing interests” of different stakeholders. “Virtue ethics” is an alternative moral language to encourage a high sense of responsibility in people, as a different approach to morality. Virtue ethics is supposed to be a link between “virtue and social responsibility” and for

developing practical wisdom, in the project of "character formation", as necessary virtues are sensitivity to others and "a connection with community". (Haller, 2017) Corporate codes of ethics is defined as "modes of formal organizational discourse" by many researchers who proposed to develop ethic terms, content, purpose, "function and effects". The code provides indications of the values, structures and processes of the corporation and some studies indicate mixed effects related to their influence on consumer behaviour. Business codes are an instantiations of the structuring of systems in the corporation, not an isolated document or practice. A study of 32 multinational corporations found that 38% of the codes analyzed were based on ethical responsibility. (Canary and Jennings, 2008)

Codes of ethics are now widespread in large corporations "around the world," according to research: more than 90% of large American corporations, 85% of Canadian companies, 57% of British companies, 51% of German companies and 30% of French companies, have and implement a code of ethics. The codes of ethics of companies are supported by society and represent the interest of the state. (Schwartz, 2002)

### **2.3. Business Ethics Worldwide**

The contrast of ethics between the worldwide countries is major. There are many similarities and differences between ethics and values in business worldwide. (Feikis, and McHugh, 2014)

Individualism as a business ethic is highly rated in the United States, where business is conducted freely, as well as fairness and individual equality are also the norm in Canada and Estonia. Business laws are the norm in the United States, in South Korea corresponding regulation and enforcement are much less strict (Paik et al., 2017), Russian companies tend to perceive written laws as something variable in their ability to manipulate state law (Rees and Miazhevich, 2008), as well as in Belarus business the culture is characterized by the pervasiveness of dual ethics while dealing with the state. United States is a less masculine society and competes on business performance, while Japan is extremely masculine and indicates a very competitive and workaholic business trait, and Mexico shows masculine approach to business and conflicts are resolved through confrontation. (Kim, et al., n.d.) Japan is moderately hierarchical, but in the United States the hierarchy is set for convenience, workers have access to leaders, while Mexico conforms to hierarchies, it is a hierarchical society. U.S. workers are self-reliant, and promotions are based on merit, while Japan business ethics revolves around heavy investment in workers, but Belarusian business culture is characterized by the importance of informal networks and low work motivation. The decision-making process in Canada is flexible, in Mexico is very rigid, while in Japan it is taken very slowly. United States government ethics model focus on the government itself, while Canadian government ethics model include their people. The United States indicates caring and focuses on quality of life, while Canada favours caring for others, and business ethics is not indulgent, while Mexico is very indulgent. Canada's culture is not normative in its long-term orientation, but it is more comprehensive in terms of power distance, while Mexico is normative in its long-term orientation. In the United States, the bribery of "foreign officials" is explicitly banned (Paik et al., 2017), and in Japan gift-giving traditions may seem like a bribe, while in Mexico corruption and bribery are considered acceptable behaviour,

a simple monetary self-interest and bribery in South Korea is considered acceptable behaviour. (Paik et al., 2017)

It is obvious that different cultures have their own "acceptable and unacceptable" economic and which in turn are affected by the environment and the cultural context. The symbols and rituals of different cultures indicate more superficial differences (Scholtens and Dam, 2007). As a result of globalization it is necessary to study national differences, and in particular, non-verbal communication from different countries. (Popescu, 2001) In international business the tiniest gesture can ruin important deal. (Piz and Piz, 2004) Industrialized countries, over the past several centuries, had several virtues which have been highly valued. (Bird, 2015) Business ethics in period of the globalization of business that over the last two decades has been phenomenal and their impact has been extensively studied in "various fields of international business research". (Paik, et al., 2017)

### **3. Persuasive practices**

Effective communication in a persuasive aspect is the basic for any person and for the success of companies and an important part of its marketing (Sabie and Androniceanu, 2012). Research, in recent decades, has shown that emotions interact largely with most cognitive areas, such as "planning, attention, memory, decision making, or language". Recent research on brain function and anatomy lays the groundwork for a combination of emotion and knowledge. Most emotional information are often processed unconsciously. (Jiménez-Ortega et al., 2017) Direct communication with personal interaction is the most persuasive form of communication. While complex information, needs to be supported by a "written format". Mass-media is a passive form of communication, but can reach large populations. (Clarke, 2013)

Advertisers are keeping finding new persuasion tactics, new ways in order to deactivate consumers "advertising early warning systems". Some tactics include new and old hidden messages, such as: product integration (or brand integration into the film, news or program content), video news releases and stealth marketing. These messages of persuasion aim to appear as perfect, natural and integrated in the context as possible. (Nelson, 2008) Subliminally or supraliminal nonconscious primes, following social cognitive research, have influenced judgments, motivations, and people behaviours. (Barg, 2002) We can list some subliminal advertising methods, such as: fast-moving embedded images, "illusions embedded in illustrations", "weak double exposures", ambiguous texts, double-meaning message, insignificant printed messages, visual advertisements, "imaging techniques with rapid fire", pulsating sounds or minimal masking in the music, "intermittent hypnotic logos". In Japan, has been developed a new devise named an air canon. It can emit subtle smells or aromas to "specific consumers" nearby which unconsciously process aromas, while other people are unaffected. (Mujtaba and Jue, 2005)

### **4. Fashion Influence**

US fashion over time has been a major channel through which the country's economic abundance has been highlighted, demonstrated and used as "a means to trigger" both desire and dissatisfaction. (Tadajewski and Stole, 2016) Currently,

fashion retailers after analyzing information about final consumer's preferences, produce "private labels" that respond to the latest fashion trends. (Herstein, Gilboa, and Gamliel, 2013) Recently, luxury brands and fashionistas are using for marketing communication Instagram in the detriment of traditional market segmentation that involved controlled exclusive distribution that evokes "uniqueness and exclusivity" through high quality and premium prices. (Jin and Ryu, 2020) In today's society, following the evolution of technologies, the Internet and as a result of social distancing due to the pandemic, social media platforms, with a "varied and rich ecology" in terms of purposes and scope, have gained increasing importance and changed the consumers' environment.

As a result of the involvement of fashion in online communities and social networks, the "relevance of understanding" this impact on consumer behavior is also necessary. Fashion brands placed on social networks have a positive influence on the brand image and fairness. (Nash, 2019) Fashion is an essential civilization art. It is "a more accurate barometer", like painting, sculpture, or other applied visual arts, which reflects the characteristics of "individual societies" over the centuries, the "great cultures of the past", as well as "a personal expression of life at a given in time and place". (Azuma and Fernie, 2003)

## **5. Conclusions**

The boundaries of Macromarketing in globalization era, codes of ethics and business ethics as well as persuasive practice with fashion influence, also online are investigated in the paper. In a changing world, corporations or people want to make a difference and often use codes of ethics or try to use persuasive practices to stand out. Theoretical studies and experiments demonstrated that a code of ethics, as well as persuasion and fashion is like an art. Fashion, in addition to its inevitable role of creating one's own self-image, is also a cyclical reflection of "social, cultural and environmental characteristics that are unique at a given moment in a given geographical setting". (Azuma and Fernie, 2003) The existence of codes of ethics and persuasion, as well as fashion or online fashion persuasion have been studied by many researchers, but very little has been brought into a joint study to research the influence they have, on each other, as a unit. In this study we conducted exploratory research analyzing marketing in an era of globalization, with codes of ethics implemented in different countries, as well as persuasion techniques and the influence of fashion or online fashion, most importantly in this difficult period of social distancing and importance during the change of style due to the pandemic. This is one of the most delicate areas of the marketing, which requires finesse in continuous researches.

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## PERCEPTION OF CHANGES IN SOCIAL INTEGRATION IN THE LOCAL COMMUNITY AFTER ACCESSION TO THE EUROPEAN UNION

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**Abstract:** *Social integration is an ongoing process in society that is strongly influenced by socio-economic changes. One of the fundamental changes in Slovak society is the entry into the member states of the European Union. The aim of the paper is to evaluate how this change affected social integration in the local community through the method of a questionnaire survey of 100 respondents. We find a decline in social integration in the local community among younger respondents under the age of 30, as well as a low interest in participating in improving the quality of life in the local community. The results obtained will be the subject of international comparison in the future. We also address them to local governments, which can influence the development of social integration in the local community.*

**Keywords:** Social Integration; Local Community; Changes; Local Government.

**JEL classification:** R11, R58, Z13

### 1. Introduction

Social integration can be understood as the connection of economic, social, and cultural awareness of society (Brissette, Cohen, Seeman, 2000). It is interpersonal relationships that play an important role in social integration in the local community. Community attitudes are extremely important in achieving social integration and inclusion (Denny, Denieffe, Pajnikihar, 2016).

According to McLain, Jones (1997), the term local community is often used to refer to a discrete social entity whose members reside within a limited geographical area and have motivations and interests regarding the management of a common territory. We can assume that if there is a high degree of social integration in the local community, it will also exist at the national level.

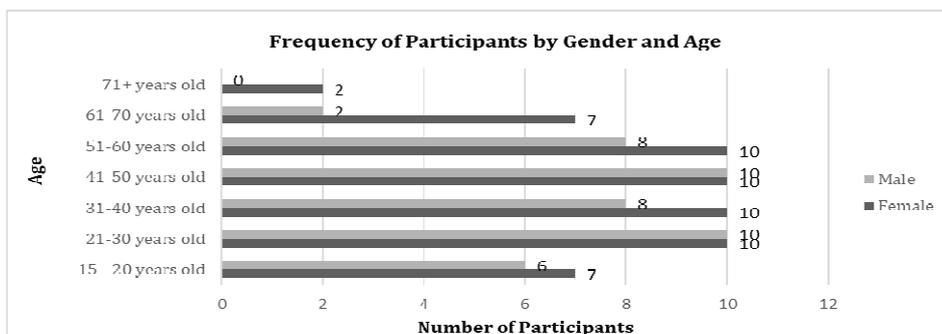
The research assumption is to find out how Slovak citizens perceive social integration in their community and whether, in their opinion, this level has changed since joining the European Union. The process of social integration takes place in different areas of people's lives: in the family, in city, at work, in a business organization, etc. (Castaños, Freire 2010). We state that social integration takes place in different social structures. For this reason, it is essential that this process

is accompanied and supported by appropriate policy action by public authorities and local communities.

The main role of the local government is to ensure activities related to management and regulation in the administered territory and to be responsible for the socio-economic development of the territory (Švantnerová, Kožiak, 2005). It is in the local community that the closest citizens and the filter are good governance. Within the limits of their competences in each European country, local and regional authorities have the political, legislative, and financial instruments at their disposal, which must act adequately for the purposes of integration policy.

## 2. Metodological approach

In analytical point of view, we used a methodological approach consisting of 4 phases. The first phase was focused on the study of professional literature to create a suitable theoretical basis for research. The design questions of the questionnaire survey in cooperation with researchers at foreign universities in Krakow, L'Aquila and the training centre in Kielce were the content of the second phase. The result of the second phase was the distribution of questionnaires among the respondents. The third phase was focused on the analysis of the obtained data, mathematical-statistical processing, and evaluation of the questionnaire survey. We state that in total more than 160 respondents participated in the questionnaire survey. To maintain a normal distribution (Figure 1), we adjusted these data to 100 respondents.



**Figure 1: Frequency of Respondents by Gender and Age (n=100)**

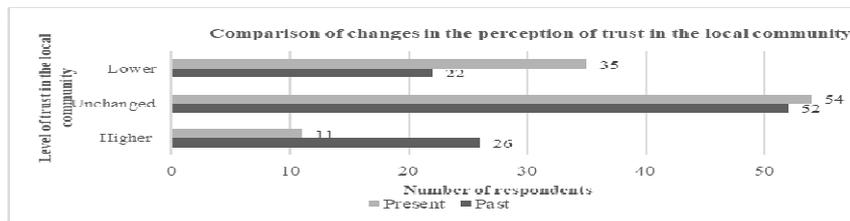
Source: own processing (2020)

The content of the fourth phase is the interpretation of the collected results. Another continuation of the research will be a comparison of the obtained results between three European countries - Slovakia, Italy, and Poland.

## 3. Research results

At the beginning of the research, we find out how the perception of trust in the local community has changed in terms of the period before and after joining the European Union. We consider the perception of trust in the local community to be an important factor and the focus of an integrated society. The results obtained are shown in Figure 2.

In terms of building trust in the local community most of respondents could not express themselves clearly. We consider the age of respondents (15 - 30 years) who did not monitor changes in the local community to be the main reason for this result. The respondent (man, 15 - 20 years) also confirmed this in his answer. He says that information was provided from the older generation.

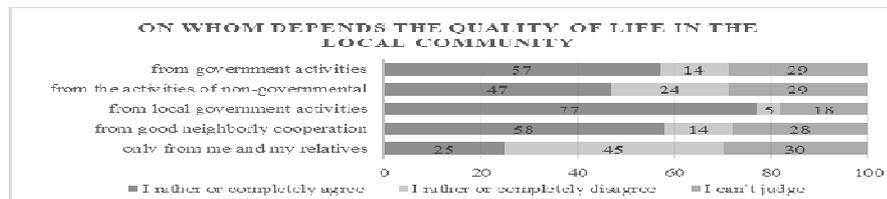


**Figure 2: Comparison of changes in the perception of trust in the local community (n=100)**

Source: own processing (2020)

In the results evaluating the current perception of trust, we find it interesting that up to 35% (of which 60.7% are men) experience a decline in trust in their local community. In searching for the cause of this result, we find that the most common reason is non-fulfilment of agreements and promises by elected representatives either at the local level (city deputies) or at the national level (members of parliament).

The latter leads us to identify the basic contribution of the community, which, according to Pecníková (2017) is to create space for the activity of citizens towards influencing society and improving the quality of life. This motivated us to find out whether the changes after Slovakia's accession to the European Union also affected the perception of the quality of life in the local community and especially who is the initiator of these changes (Figure 3).



**Figure 3: Perception of the initiator of change in the local community (n=100)**

Source: own processing (2020)

As many as 77% of respondents perceive local self-government as the most important initiator of change in the local community. However, according to the respondent (man, 31-40 years), in his opinion the local authorities have not yet developed for independent management. However, within the Member States, they could learn and adhere to democratic rules, procedures, principles and established laws. The European Union is a guarantee of democratic development.

Respondents at the local level perceive neighbourhood cooperation and at the national level government activities as the second important initiator of change. Conversely, 18% of women and 12% of men, most often between the ages of 21

and 30, disagree that an initiative based on their actions and those of their immediate surroundings can have an impact on changes affecting the quality of life in the local community. We were interested in this result, because an active citizen is the basis for a quality life in the community.

The evaluation of the local perspective confirmed that respondents perceive the changes that occurred in their community after joining the European Union to 72% (40 women and 32 men) positively. 44 women and 33 men of all ages consider the development of infrastructure to be the greatest benefits for the local community. In terms of threats, up to 42% of respondents (in 30 - 50 years) perceive a decline in population due to migration for work to other countries of the European Union.

#### **4. Conclusion**

The research assumption of the work is to find out how Slovak citizens perceive social integration in their community and whether this level has changed since joining the European Union. Based on the survey, social integration mapped through the perception of trust in the local community was not directly confirmed. At the same time, political events at the local and national level have a significant influence on the perception of trust. However, Slovak society evaluates the changes that have occurred in the local community positively. A significant advantage for the local community is the development of infrastructure, on the contrary, the threat is migration for work to other European countries. Also, the attitude of the citizens, who consider the activity of local self-government to be important but their own initiative to be the least influential for the quality of life in the local community, needs to be further discussed. Here is created space for further research aimed at mapping citizens' activities at both local and national levels.

#### **5. Acknowledgements**

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## DIGITAL ECONOMY AND THE COMPETITIVE ADVANTAGE

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**Abstract:** *The new economy or the digital economy, resulting from the interaction between the personal computer, telecommunications, internet and electronics, is characterized by many features completely different from the traditional economy. It is about building a business model, e-commerce, e-banking, etc., through intra-internet, which radically will change the efficiency, in the sense of reducing the costs, including transactional ones, based on: business to business relationships (B2B), business-employee (B2E), business and government (B2G), government and business (G2B), etc. The changes have to go beyond the patterns we have become accustomed to. The competitive advantage represents that differentiating factor, financial or qualitative, perceived by the target audience as superior to competition. This is what justifies brand loyalty, although in recent years this is no longer a guarantee. This is also where sustainability comes in. Gaining competitive advantage means keeping the line in digital markets and increasing the performance of companies through technological and IT innovation. The companies that benefit of the competitive advantage are being more cooperative than the noncooperative ones, which gain lower competitiveness. Success is caused by the good relation between structures in the industrial sector and competitiveness. Digital transformation is a concept involved in the process of gaining competitive advantage.*

**Keywords:** digital transformation; digital market; DSM (Digital Single Market); competition; innovation; competitive advantage;

**Classification codes JEL:** O35; O36; D41; D42; L1; L8

### 1. Introduction

The data shows that in order to face stiff competition, new companies need to adapt to the specific requirements of the digital economy. The Internet and digital technologies are changing the face of our world. Competitiveness standards are imposed by the degree of implementation of the digital productive transformation process. Digital transformation causes many situations that need solutions, like: digitalization of industry is lagging behind; incomplete DSM (digital single market); digital divide; lack of digitally competitive workforce; low number of digital champions; lack of cybersecurity readiness; building trust in digital transformation; lack of investment; increased productivity and jobs; increased efficiencies; empowerment, etc. All these problems create the need to implement models specific to technological revolution. Digital innovation centers are yet one of the main elements of the digitalisation strategy, of the European industry. Within

successful Digital Europe programs, these centers would function as a one-stop shop, offering their clients: access to digital technologies and skills, an infrastructure for testing digital innovations, training courses for the development of digital skills, financing advice, market information and network collaboration opportunities, etc. The future will be governed by technology and machines. (Kitov, 1956:358, Bondarenko, 2019:3).

## 2. The Digital Economy

There are many definitions for this concept. (Tapscott, 1996, Lane, 1999, Mesenbourg, 2001).

The term digital economy comes from the term information economy, which treats the expansion of information and technology, on the grounds of the development of digital transformation in a pro-competitive environment. The concept refers to the largely unrealized transformation of all economic domains by computer digitalization. (Brynjolfsson, Kahin, 2000). Mesenbourg, (2001) divides the digital economy main sectors, into production of ICT infrastructure and the application of ICT, for other economic actions. The ICT infrastructure encompasses the devices, networks, protocols, procedures designed for telecoms and IT, with the purpose of encouraging competition, the information exchange and technology infrastructure, as an ensemble.

Organizations can become more and more efficient, if they obtain the competitive advantage from the digital markets. This is possible if the level of use for IT, grows. (Porter, 1985, Brynjolfsson, Hitt and Yang, 2000).

There are three main features of the digital economy: it is unevenly distributed; it is growing faster than overall economies, especially in the global South; it contributes significantly to employment. (Bukht, Heeks, 2017:19).

The digital economy is evolving at a fast pace, its growth is being determined by the intensification of competition on the digital markets. Digital markets are really making progress, when technology on technology markets, is advancing very fast through innovation, on the IT fields.

**Table 1:** Big Data and Advanced Analytics (BDAA), 2020-2040

EDT Electronic Data Transfer	Technology Focus Areas	Impact	Attention	TRL Technology Readiness Levels	Horizon
Data	Advanced analytics	Revolutionary	Expectation	4 (Component and/or breadboard validation in laboratory environment)	2025
	Communications	High	Enlightenment	6 (System/subsystem model or prototype demonstration in a relevant environment)	2030
	Advanced Decision Making	Revolutionary	Dissillusionment	6 (System/subsystem model or prototype demonstration in a relevant environment)	2025
	Sensors	High	Expectation	4 (Component and/or breadboard validation in laboratory environment)	2030

Source: Wells, Peach, Nato, Science and Technology Trends 2020-2030 (2020:21)

The table indicates the areas of interest for the research activity, in the field of new technologies, their impact upon competition, areas of focusing on technology and competition and the degree of completion for modern technologies. It is observed that the communications and decision-making management, have priority for the research, while the advanced research for certain fields is occupying a second place.

### 3. Digital transformation and the competitive advantage

The internet process started during 1950, with the development of electronic computers and after 1969 internet networks were launched with the help of Pentagon computers called Arpanet.

When we think about digital transformation we think about automation, speed, technology, machines, robots, artificial intelligence, mobility, augmented reality, face recognition, fingerprints, biometric data, 5G, genetic manipulation, internet of objects, sensors and many other modern technologies, etc.

Competitive digital markets have the role of implementing digital transformation.

*Digital transformation means a fundamental change in the way an organization serves the customers, and it is concerned about radical thinking and the methods of how an organization uses technology, people and processes, for the purpose of profit. Digital transformation has to lead to the digital revolution and must accelerate the economic competition.*

**Table 2:** The keywords that constituted the emerging technologies for the machine tools

Technology	Keywords
Big data	Big data, data collection, data transmission, transfer protocol, Ethernet, industrial wireless network, Message Queuing Telemetry Transport(MQTT), NC-Link, MT-connect, wireless transmission, distributed platform, Hadoop
Cloud computing	Cloud computing, edge device, edge module, fog calculation, fog end equipment, cloud platform, cloud service, cloud storage, cloud industrial, cloud, distributed computations, parallel computing, cloud manufacturing
Internet of things	Internet of things, industrial, internet of things, industrial internet, IoT, iIoT
Cyber-physical systems	Cyber-Physical system, CPS, Digital twins
Intelligent methods and applications	Artificial intelligence, machine learning, logistic regression, support vector machines, naïve bayes, decision tree, random forest, transfer learning, deep learning, virtual reality, augmented reality, convolutional neural network, recurrent neural network, restricted Boltzmann machine

Source: MDPI (Chen, Zhang, Zhou, Liu, Li, Yin, 2019:18)

The table describes the most important keys for implementing new technologies, in order for the society and economy to become more and more competitive, in a competition world.

*Michael Porter, among others, an economist, researcher and professor at Harvard Business School, is the author of a book published in 1985, Competitive Advantage, which later became a reference material for anyone interested in the*

*business environment. Mr. Porter considers that the competitive advantage represents a concrete benefit related either to the purchase value or to the characteristics of the product or service offered, which, through their uniqueness, would justify a higher price. In other words, you can't win unless you're either cheaper or different (and thus perceived by customers as better or more relevant). From the perspective of the digital economy, the competitive advantage is a concept, whose applicability is determined by the degree of technologicalization, in other words by the technological progress and the speed of assuming new IT values in the organization. Digital transformation is formed and perceived as the sum of the competitive advantages for IT and new technologies. (Fuentes, Camara, Hernandez, Sanchez, 2003:2-10). Developing new competitive digital markets and gain competitive advantage by implementing new technologies, is the key for solving price and quality competition dilemmas. (Maksimovic, Kostic, 2010:39-56, Kostic, 2018)*

#### **4. Pillars of interest for Europe and Romania**

The Digital Agenda for Europe and Romania 2020, follows the next structure:

- a) Pillar 1 - Digital Single Market - allows free cross-border access to services and entertainment online;
- b) Pillar 2 - Interoperability & Standards - allows integration of devices, applications, and data services required for interacting across borders;
- c) Pillar 3 - Trust and Security - increasing the confidence of Internet users in electronic services and online transactions, in order to stimulate the consumption of ICT services;
- d) Pillar 4 - Fast and ultra-fast access to the Internet - target investments for band infrastructure wide, in order to benefit from the latest electronic technologies and services;
- e) Pillar 5 - ICT Research and Innovation - stimulates adequate funding for growth competitive advantage in ICT;
- f) Pillar 6 - Increase the level of digital literacy, skills and inclusion - create one bridge over the digital divide for all consumers, so that they can benefit in equally full advantage of ICT services;
- g) Pillar 7 - ICT benefits for EU society - focus on ICT's ability to reduce; to consume energy, to support the assistance of the elderly population, to revolutionize the services of health and to provide better public services. (Romanian Government, 2020).

It is important to approach those pillars, in order to develop new perspectives for the digital environment.

#### **5. Conclusions**

To achieve the specific objectives for the digital economy, nations have to adjust competition to digital market sequences standards. The strategy for the digital markets have to follow three pillars: improving the access of consumers and businesses, to digital goods and services; creating and enabling environment for the development of digital networks and services, with the scope of maximizing the growth potential of the digital economy. Based on a comprehensive experience in configuring digital platforms across multiple domains, people will be able to identify

the right technologies to convert the existing ICT (Information Communication and Technology) infrastructure into a seamless, scalable and integrated ecosystem that will transform the way our businesses operate and will allow continuous improvement of processes. Competition and competitiveness will make sense in the civilization of the future, tangential to the development of the technological process on technological markets. For many reasons digital economy will become a priority for the competition policy. It's time for Europe and the whole world to adapt to the digital age, removing the "walls" of regulations for online services, that could create hundreds of thousands of new jobs and new business opportunities. A digital single market means fewer barriers, more opportunities, a space in which citizens and businesses can run, innovate and interact legally, safely and at a reasonable cost, making their lives easier. Trust is indispensable. Cooperation for cross-borders, law enforcement will ensure the fulfillment by those platforms, and of the obligations, which they have to do for consumer rights. By example, the obligation to clearly indicate the results of sponsored search (European Commission, 2016:5-20). The Commission has adopted a new comprehensive agenda for skills in Europe. Its purpose is to guarantee assimilation of a wide range of skills, from an early age tender and to make the most of the human capital of Europe and the rest of the world, which will ultimately lead to increase, the capacity for professional insertion and competitiveness and will stimulate growth.

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# THE EVOLUTION OF PUBLIC FINANCES IN THE CONTEXT OF COVID-19. SIMILARITIES / DIFFERENCES COMPARED TO THE PREVIOUS CRISIS

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**Abstract:** *The start of a crisis, whether it is a financial or a health crisis, is a negative macroeconomic phenomenon, with consequences for both the entire world and the European Union. The aim of this paper is to study and analyze the evolution of public debt and budget deficit in the European Union, but also the measures taken by the Member States in the context of COVID-19. I will also compare the programs of measures adopted by the authorities for the current crisis compared to those of the financial crisis launched in 2008. Comparing with the way the information is presented in the bibliography used, this paper contains only the essential aspects, the particularities of the topic chosen, which provides an overview.*

**Keywords:** crisis; public debt, budget deficit; Covid-19; measures; evolution;

**JEL classification:** H12; H30; H62; H63;

## **1. Introduction**

The onset of the 2008 financial crisis, as well as the current health crisis, had a strong effect on public finances, more precisely by restricting economic activity which led to a decrease in revenues and an increase in public spending, respectively to a considerable increase in public deficit and debt.

The financial crisis of 2008 had a strong impact on the European Union and subsequently led to a slow and long-lasting recovery. All this unfavorable situation has severely affected the less developed European countries, which have come to face economic imbalances and accumulate significant debts. This paper is structured in five distinct parts, as follows: (i) the first part includes the introduction, (ii) in the second part the level of knowledge, (iii) in the third part the research methodology, (iv) in the fourth part the analysis of public debt and deficit, but also a comparative analysis of the similarities and differences regarding the measures taken by the authorities in response to the financial crisis from 2008 compared to the current health crisis from 2020, (v) and the last part contains the conclusions.

## **2. The level of knowledge**

The rise of a global or regional crisis is a recurring phenomenon and we need to learn how to build new market regulation reforms so that we can mitigate repeated occurrences. (Ellert, 2019).

One of the distinguishing features of the financial crisis of 2008 is the sudden collapse of global credit as a result of the cessation of interbank lending amid uncertainty and exposure to high debt. (Roubini și Mihm, 2010).

The outbreak of the COVID-19 pandemic has created many challenges at the European level, leading to large-scale fiscal measures due to spending growth decisions and the granting of several tax exemptions to both individuals and companies during an unfavorable economic situation. Even if this new crisis disappears, its effects will be felt in the long run, because many states will face high debt amid permissive fiscal policy. (NBER, 2020).

### **3. The research methodology**

This paper is based on a mixed methodology, as it includes both the method of descriptive analysis, used to achieve the stage of knowledge, and a dynamic macroeconomic analysis used to analyze public debt and deficit, which are highlighted in the form of time series, namely graphs. This paper also includes a comparative analysis of the measures taken at the level of the European Union according to the economic context, focusing on the crisis of 2008 and the current crisis. To realize this paper I used the database taken from the Eurostat website on public debt and the budget deficit in the European Union and the Member States, for the periods 2008q1-2009q4 and 2019q1-2020q2.

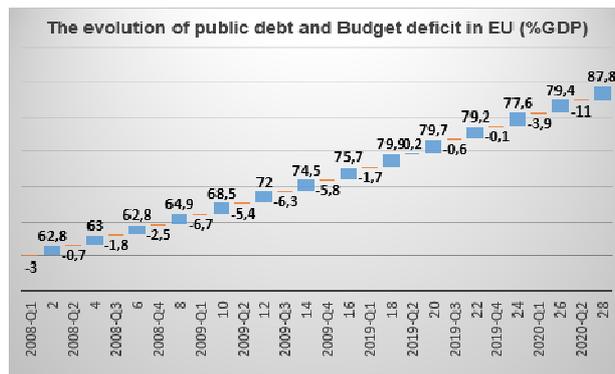
### **4. Evolution of public finances**

According to the analysis made, it can be seen, according to the graph, the trend of improvement of public finances in 2019 at the level of the European Union as a result of measures taken by the authorities, which mainly aimed at implementing structural reforms, investments and promoting responsible tax policies. Actions at the European level have also contributed to this favorable situation, including the Investment Plan for the European Union, which has significantly influenced stability and prosperity.

However, the onset of the current health crisis has led to a reduction in activity and thus a deterioration in public finances in the first months of 2020, amid declining budget revenues as a result of a delayed payment of more tax obligations due by economic agents, increasing investment spending and subsidies, which subsequently led to an increase in debt and a budget deficit.

In this situation, European states are facing a series of new challenges amid the pandemic that has led to the introduction of measures of isolation and stopping economic activity in several industries, which will ultimately materialize in much lower revenues and much higher government spending. To meet these new challenges, the authorities have resorted to a series of loans to cover social protection expenditure and other expenses.

Thus, the growing need of the governments for financial resources in recent times will lead to rising deficits and debt to finance short-term activity. All these actions taken during this period to alleviate the economic costs of the recession and to form the first line of defense against debt sustainability concerns will lead to a stronger and longer-lasting recession that may lead to medium-term debt sustainability risks.



**Figure 1:** The evolution of public debt and Budget deficit in EU (%GDP)  
 Source: Eurostat, <https://ec.europa.eu/eurostat/web/covid-19/economy#>

#### 4.1. Similarities / differences from the previous crisis

The main difference between the current crisis from the previous crisis is the cause that determined it. Specifically, the financial crisis of 2008 arose due to a lack of regulation and supervision, which led to the existence of unfavorable financial management. Thus, a financial crisis was created which subsequently led to the onset of an economic crisis, and its intensity was reduced with the help of measures taken by central banks and governments. As for the current crisis, it did not arise due to the economic context, but against the background of the COVID-19 pandemic. This leads to a paradigm shift and many new challenges and uncertainties. However, even if the cause of the two crises is different, both have significantly affected public finances and the economy.

There are also other differences between the two crises, including the existence of more capitalized and robust financial systems in the developed countries, a prudent fiscal policy in the European Union that has led to lower deficits and public debt over time. Moreover, a large part of the European states registered a downward trend of debt and budget deficit until the onset of the pandemic, which means the recovery of previous losses.

Another difference between the two crises is the speed of spread, as the crisis of 2008 gradually began in the US and later in Europe and other countries, while the current crisis has spread much faster globally, affecting more and more countries in a short period of time. As for the similarities between the two crises, they are not many due to the context in which they broke out. However, an important similarity is related to the impact of global economies, by worsening macroeconomic indicators and increasing indebtedness.

#### 4.2. Measures taken at the EU level against COVID-19 versus the financial crisis of 2008

The measures adopted by the authorities amid the onset of the financial crisis in 2008 aimed at implementing financial incentive packages by increasing public spending, investment, tax cuts, state aid, and income tax cuts. Subsequently, several austerity measures were adopted to reduce the budget deficit and public debt, which consisted of reducing total and staff costs.

About the current crisis, European countries have taken many measures, both fiscal, social, and economic, to provide support to companies and citizens, but also

to reduce the risk of an economic crisis. Among the most common measures taken are an implementation of state aid for low-income companies due to the pandemic, legislative changes, the flexibility of the legislative framework, allocation of European funds, granting more fiscal facilities to individuals and companies, suspension of the obligation to pay certain taxes, duties and installments, the granting of the unemployment aids, but also others.

## 5. Conclusions

According to the analysis, it can be seen how the onset of the financial crisis of 2008 and the current health crisis has led to the registration of macroeconomic imbalances, more precisely to the deepening of the budget deficit and public debt. The financial crisis has highlighted the fact that many European countries are facing various fundamental problems and unsustainable long-term trends. This crisis has emerged amid low regulations in the financial system, specifically at the level of the credit sector, which has managed to accumulate effects on a global scale. The impact of the crisis on Europe has been strong and has led to a slow pace of recovery.

Concerning the current economic context, together with the need to identify measures to reduce the effects of the pandemic, it is recommended that further research on the subject be addressed, so that European states will not subsequently face even greater imbalances and the recovery rate will be fast. The significant increase in indebtedness in recent times, both globally and in the European Union, could lead to a new crisis, which will further affect states.

Also, the measures taken by the authorities are unprecedented compared to 2008, as states have allocated much more money to reduce the effects of the current crisis. These actions have led to a considerable deterioration of public finances and an increase of risks to their long-term sustainability.

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# SYNERGIES BETWEEN DIGITAL INNOVATION HUBS AND EXISTING INSTRUMENTS FOR REGIONAL DEVELOPMENT IN THE CONTEXT OF THE EUROPEAN UNION

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**Abstract:** *2020 is a year of change all around the world with the health crisis affecting the economies of all players. However, some fields find it easier to get through the recession through digital solutions. Digitalization is no longer just an option, but an indispensable tool for tackling the greater recession of the economy. To make proper use of a tool first we have to understand the process. This paper aims to identify the possible orchestrators of innovative ecosystems, called Digital Innovation Hubs – a concept, that has been launched recently in the European Union. At the level of the structure, we have discovered several similarities with entities as clusters. This paper takes under review several possible management options of a DIH by a cluster consortium, regional innovation consortium under the concepts of the Smart Specialization Strategy and Business Incubators as micro-innovative-entrepreneurial ecosystems. However, capacity building on regional level for competitive DIHs in developing countries is an already concretized challenge. A hypothetical review of different policies as clusterization and smart specialization is undertaken in order to provide a better understanding of this omnipresent tool for digital transition.*

**Keywords:** digital innovation hub; cluster; business incubator; regional development; innovative ecosystem

**JEL classification:** O19; O20; O21; O30; 038; P41

## 1. Policy Background

Digitalization as a policy within the European Union was started in 2016 by launching the Digitalizing European Industries (DEI) Strategy. Since then, several organizations have been convinced to update the way they provide content and have become facilitators of digital transformation - Digital Innovation Hub (DIH) – supporting small and medium sized enterprises in the process. Recently, the European Commission published a handbook concerning the steps to strengthen DIHs as an ecosystem for a green and digital economy, which can be positioned advantageously on the global level from a competitiveness point of view. (Kalpaka, Sörvik and Tasigiorgou, 2020) To meet the principles of sustainable development and to account for environmental challenges, the new policy guidelines highlight additional aspects of the services a DIH should provide. Within the European Industrial & Digital Strategies (2020) and the Digital Europe Programme (2020), the Digital Innovation Hub initiatives of Europe are supported and managed collectively. These frame programs both enhance the establishment of such

ecosystems and support the consolidation of existing ones. According to the Joint Research Centre of the European Commission from the Horizont 2020 program, 650 DIHs are registered, 359 fully operational, 218 in preparation and 73 marked as potential DIHs. At the same time, it's important to mention that the national call for EDIHs (European Digital Innovation Hubs) stimulated the establishment of new structures that fit the requirements of the call.

According to the JRC Science for Policy Report (2020), DIHs are *“one-stop-shops that help companies become more competitive (...) using digital technologies, by providing access to technical expertise and experimentation, so that companies can “test before invest”*” (European Commission, 2020). Despite this definition, a conceptual clarification was required to launch financing programs for hubs for the 2021-2027 period. Within technical assistance programs such as Smart Factories in New EU Member States, DIHELP and Digital SME, organizations which are defined as DIH members participated as independent DIHs making reference to their formal and informal partnerships. This approach rules out the ecosystem-like character of the instrument, which required comprehensiveness in order to meet the century's challenges (Butter et al., 2020).

## **2. Research methodology**

The method used in this research was a qualitative one, conducted by a systematic literature review and interpretative phenomenological analysis including comparison of concepts. The research focused on official documents published by competent authorities about digital innovation hubs and clusters in the last 4 years. Recent research journals and scientific articles were used retrieved using Google Scholar.

## **3. DIHs, Clusters and Business Incubators**

Considering the given structure of a Digital Innovation Hub by the foreseen publications, we can emphasize the similarities with cluster models (Izsak et. al., 2016) from several European countries. For instance, in the case of Romania clusters are considered vehicles for regional development where actors representing different sectors collaborate to achieve common goals. These sectors are: businesses, academia & research, policy makers and catalyst organizations – entities with no direct relation to the respective economic field as consultants, media, financial institutions (Vajda and Mátyus, 2016). The main difference between the two approaches is that clusters are focused on specific economic fields in contrast with a digital innovation hub and which are encouraged to focus on specific technologies, such as artificial intelligence, cyber security, internet of things, blockchain, etc. Furthermore, in the same publication, clusters appear as members of DIHs. Analysing the existing business models of clusters from developing countries, such as Romania, we can enunciate that multidisciplinary cluster consortiums covering the priority areas of Regional Smart Specialization Strategies are ecosystems meeting the requirements of a competitive digital innovation hub. The governance structure of a DIH is akin to that of clusters as well, an orchestrator of a DIH covering identical attributes as a cluster management entity. More than that, clusters are considered networks (Scheer, Zallinger, 2007), and cluster consortiums networks of further networks. Smart Specialization

Strategies were developed to reduce discrepancies between the regions of EU and to enhance the efficiency of public investments, (Barca, 2009; Foray, David & Hall, 2009; McCann & Ortega-Argilés, 2015; Balland et al., 2019), focusing on the regional potential and directing the majority of resources to priority economic fields. There is an inter-complementary relation between RIS3 and the strategies of digital innovation hubs holistically (Rissola & Sörvik, 2018; Miöner et al., 2019), and accurate interactions and assimilative measures are encouraged.

The most common exemplification of the potential contribution of a DIH to regional development (Miöner et al., 2019) is their ability to reinforce digital technology-based startups and to foster the creation of new products and services by more mature SMEs (Hintsala, Niemelä, Tervonen, 2017; Rissola & Sörvik, 2018). In this sense, the role of Business Incubators (BI), co-working spaces and accelerators becomes crucial. Business incubation provides one of the most effective strategies to promote community entrepreneurship (Li et al., 2020), and also plays a significant role in supporting entrepreneurs by overcoming resource constraints to start and implement businesses successfully (Liedtke, 2020). The community building aspect mostly reflects the intangible services the Business Incubator (BI) provides (Moleiro et al., 2019). In this sense, Business Incubators can have an essential role in the regional innovative ecosystem (Chirchiatti, 2016), integrating already the core target group: startups and SMEs. Within *DIHELP programme* conducted in 2019, a Business Incubator was selected as a promising DIH initiative – the BI of Sfantu Gheorghe, a town with approx. 56000 inhabitants located in Romania. Beside of companies, the incubator hosts international business support organizations and also regional clusters have their management entities there, whose activities focus on the priority areas of the RIS3. These clusters use the same concept based on 5 pillars in their development strategy: business & value chain development, research & innovation, education, awareness raising, internationalization, marketing.

#### **4. Main findings and Discussion**

Being a very new and low-researched concept, it is hard to measure the effectiveness of this structure in the form of indicators, especially considering the intangible character of some of the services, such as community building, interactive environment for networking and knowledge creation. These facts explain the phenomena of coworking spaces and business incubators becoming Digital Innovation Hubs (Vakirayi & Van Belle, 2020). We can also see in the European landscape several universities transitioning themselves in DIHs. This phenomenon can be explained by the given concept of DIHs in 2016, defined as enablers for technologic transfer from research to industry.

The main findings of the research focus around the ecosystem in the sense of structure and nature of Digital Innovation Hubs, which imposes networks instead of individual entities applying for support programs. However, a DIH *can be functional only if each actor of the consortium is viable in itself too*. Viability is often conditional to the national policy system. There are EU countries with no functional cluster policy to stimulate the growth of clusters and strengthening their role in the economy. Hence, many of the clusters have an insufficient attractiveness quotient along SMEs. Members of a regional DIH should co-exist and co-create interdisciplinary and complementary, adapting the intervention strategy to the

regional reality. Addressing services as a DIH only for those companies which have the capacity to integrate solutions above 5 TRL (technology readiness level), there is a good chance for discrepancies between regions. On the other hand, the question remains of what is the intangible factor that can facilitate cooperation between actors of this networked organizations without legal form, in order to act functionally as an enabler of digital transformation for greener and digitalized regions? Quadruple Helix perception of cooperation (Carayannis & Campbell, 2009) implicates several risks for failure especially if the actors don't share the same vision. This model – organic part of the workflow of clusters and DIHs, is a crucial behaviour which has to be adopted by the actors of the ecosystem. Other concepts remain to be researched regarding their adaptability to the strategy of digital transformation like smart village, smart city or circular bioeconomy. In this moment policies don't refer to the accurate responsibility of orchestrator concerning the above strategic concepts of development. These concerns are especially relevant for more rural countries and in developing countries where based on the DESI Report, digitization of processes in public services, business and civil society level is low.

## 5. Conclusion

We can conclude that is not a coincidence that European clusters are applying to become specialized digital innovation hubs, even if they are only intermediating the access for research infrastructure for the core service of a DIH and especially of an EDIH: test before invest. It is still not clarified if it's adequate to undertake the orchestrator role an entity of the ecosystem owning the infrastructure. However, structures that have recently entered in the competition for the EDIH title have to integrate the critical mass in order to achieve the program's objectives. On national level, entities are still competing with each other, but in the next stage, winners have to become partners with their competitors. It also remains an open question if innovation hubs – networks for digital transition respecting the 3 core principles of sustainability will be implored by key performance indicators to implement measures in rural areas inclusively. Without consolidating the networks' elements there is a concern that DIHs will represent a *supra-structure* of organizations currently struggling with financial sustainability problems. Hence, it is essential to strengthen the ecosystem players and to adapt the policy to the regional requirements, accepting the fact that digitalization - in some cases - have to be started with digitization of data, and awareness raising which emphasizes a bottom-up approach.

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## ANALYSING THE PROCESS OF SOCIAL INNOVATION

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**Abstract:** *This paper provides a brief overview of the tools which can be used for evaluating social innovation process. Social innovation formulates a constant demand to improve people's well-being, which is also part of the framework for social progress. Accordingly, achieving the intentions of social innovation contributes to leaps in social progress. In most cases a group or community works together during the innovation process. Participants often come from different field of action with various experiences and decision levels. Mutual understanding and accordance are needed for effective work. If the priority of participants is diverse, the social aspect becomes de-emphasized. Mutual understanding of the implementation process and information utilisation help to eliminate uncertainty and resolve cognitive limits.*

**Keywords:** decision support, social innovation, social innovation process

**JEL classification:** O35

### 1. Research background

The role of social innovation is very important in economic growth, because of its cross-border and self-exciter attributes. In order to evaluate the process of social innovation at different levels, defining the factors is necessary to measure the effect of each phase and applying different approaches for decision support. Various characteristics include quality, satisfaction, acceptance, understanding and cost reduction can be measurable variables during the assessment (Kaderabkova-Saman, 2013). It is noticeable that various success factors were identified in connected to different types of social innovation. Success factors cover a limited number of areas where satisfactory results ensure the improvement of well-being through the success of process (Rockart, 1979). Success factors approach allows to focus on critical decisions of process, because achieving goals is highly dependent on proper and accurate evaluation of success factors (Anand et al., 2009). Based on systematic literature review, the most cited success factors are:

- Collaboration, integration: individuals, organizations and communities involved in the action in any way. Lack of support and common thinking are impedimental during the implementation, so openminded, innovative approach, empathy and patience are needed to conduct the process (Brandsen et al., 2016; Carvache et al., 2018; Neumeier; 2017; Wilde et al., 2018).
- Culture: be part of a social innovation action requires different attitude and routines in comparison to everyday work or voluntariness. Different values and attitudes are necessary to support the confidence and commitment in an

unprivileged community, the results of social innovation are not developed at once in most cases, maintain the community cohesion is essential for developing the supporting culture (Bekkers et al., 2013; Dziallas and Blind, 2019; Neumeier, 2017).

- Experience: successful earlier activity by the innovator or participants. The previous experience helps to determine the way to develop the necessary knowledge and reduces the number of possible mistakes in the initial stages. Previous activities can be participation in start-up activities, volunteering, participation in non-governmental organizations or participation in previous innovation activities (Dainienė and Dagilienė, 2015).
- Sustainability: implementing the right action is hardly enough for a successful social innovation process, the long-term sustainability is the key for improving the quality of life. Financial supports are temporary in most cases, the process should become self-supplying in order to sustain it (Brandsen et al., 2016; Carvache et al., 2018; Wilde et al., 2018).
- Replicability: successful actions can be good practices if the realisation of process is reproducible. Because of the singularity of each action, all circumstances cannot be repeated, therefore worth to analyse the necessary conditions for possible further actions in different places (Carvache et al., 2018; Wilde et al., 2018).
- Social learning: the learning process is presented in every stage of social innovation process. Knowledge sharing can happen between implementers and participants in all context. In initial stages extending the available knowledge and transfer it are necessary for integration in the process. Internalisation of knowledge and rooting it are one of high priority actions. Lack of knowledge can be one of the most critical risk factors during the whole process (Bekkers et al., 2013; Dobeles, 2015; Dziallas and Blind, 2019; Carvache et al., 2018; Neumeier, 2017; Rodriguez et al., 2018).
- Financial resources: one of the most critical point in the implementation process. Community contribution and search for funding opportunities can contribute to gain the opportunity for success. Tenders and cross-border support also can be options, but the most effective way is the self-financing (Dziallas and Blind, 2019; Neumeier, 2017; Wilde et al., 2018).
- Communication: the basis for knowledge sharing. Communication can be accomplished in person or using ICT tools, the main determinant is being regular. The top-down and bottom-up approach equally important, the lack of it can lead to an inadequate response to needs. Integrating the underprivileged people from the communication point of view should be priority during the social innovation process (Neumeier, 2017).
- Non-financial resources: financial resources considered one of the most critical point of the action, but without humans, ideas and recognizing the advantage of local abilities the process will be long-continued and hardly sustainable (Wilde et al., 2018).
- Leader, innovator: a person, group, or organization who helps to colligate the whole process, involving and encouraging people to take actions step by step for improving the quality of life (Bekkers et al., 2013; Dobeles, 2015; Rodriguez et al., 2018; Wilde et al., 2018).
- Infrastructure: in a small town the implementation of innovation practice affects the small community within it. Effective implementation and results

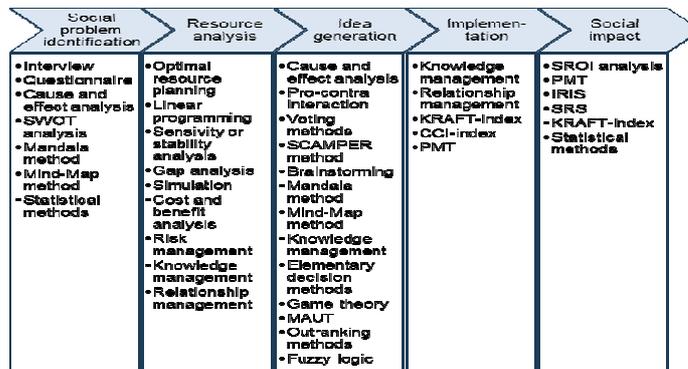
require the consideration of local abilities. In this level the supportive attitude of local government is essential to involve individuals. In addition, the state of development of existing infrastructure is a leading question to choose the proper activity (Bekkers et al., 2013; Brandsen et al., 2016).

- Applied techniques: it is necessary to analyse the impact, sustainability and optimal functioning of tools, techniques and technology used in the process. Implementation often requires the use of machines, equipment, and other tools, knowledge is essential for their usage (Rodriguez et al., 2018).
- Expectations: some of the expectations come from the regulatory environment, the indicators required by subsidies and tenders such as maintenance time, employment, and utilization rate, other part comes from participants related to concrete applicability and improvement of well-being. If the result of social innovation practice unable to reach the expected level, the long-term sustainability will be failed (Bekkers et al., 2013).
- Novelty: new or novel practices are implemented, when the activity has not been conducted elsewhere or materialized at a different location. Same conditions are required from previous practice because of the nature and uniqueness of social innovation. If these conditions are not available, necessary to consider the possibility of fulfilment of other conditions and modifications of practice (Bekkers et al., 2013; Wilde et al., 2018).
- Networks: during the implementation process of social innovation activity, different types of relationships are formed, and its network supports the long-term sustainability and knowledge sharing. Networking is possible in supply chain, which involves not only the direct supplier and buyer but investigating the entire chain and support contact with stakeholders can be crucial during establishing further partnerships. In addition, the community can be developed into a network involving small community, residence of township where the implementation materializes and other participants such as foundations. Cumulative knowledge is created in the network which can be used for further activities (Brandsen et al., 2016; Dziallas and Blind, 2019; Neumeier, 2017; Wilde et al., 2018).

## **2. Decision methods for evaluating social innovation process**

Applying multi-criteria decision-making methods is significant in every aspect of life. However, complicated procedures are less known. Making decision is made more difficult by the number of variants, existence of objective and subjective criteria, inconsistencies etc. For this reason, several decision supports methods have been developed, but one single adequate method cannot be applied in all cases, choosing the possible right method is influenced by many criteria, situation and the decision maker itself. Multi-Attribute Utility Theory and Outranking relations are the two main line of multi-criteria decision techniques. Applying Multi-Attribute Utility Theory means the aggregation of criteria into function, and the examination of mathematical conditions of aggregation by maximization of the function. The compensation between criteria is allowed by the theory of method, consequently the profit of one criterion compensates for the loss of another (Pratt, Raiffa, Schlaifer, 1976). In Outranking relation an alternative come forward in preference order if it is at least as good as the follower while there is no essential reason to disconfirm the statement (Bouyssou, 1996). Based on the preference of the

decision maker, multi-criteria decision-making method can be selected to determine the importance of success factors and its preference order. The techniques can be used during the social innovation process are limited by reason of variety of social innovation problems and range of available data. Different approaches are needed in each phase of the process for exploiting the social knowledge and supporting individual decision-making. The basis of choosing the appropriate method is provided by the complexity of problem, range of participants and other influencing factors. Figure 1. illustrates a non-comprehensive range of decision support methods can be used during the process of social innovation.



**Figure 1:** Possible decision support methods for social innovation process  
Source: Own edition

The process can be promoted, and its impact can be measured with properly chosen method. Both qualitative and quantitative information are required for social innovation related decisions, making a constant priority order among influencing factors is beyond possibility, for this reason procedure is needed to manage priorities involving non-numerical correlation in the evaluation.

### 3. Conclusion

Choosing the appropriate method helps to understand the nature and necessity of participants and process of social innovation. Different phases of the process require different tools and techniques to support the implementation. Success factors are required to consider during the whole process, it is essential to attain the expected result. Knowing the influencing factors of social innovation helps to identify the critical points of the process and planning the right actions for manage them. Flexibly developed decision support system is needed to support each step of the process. Involving the participants is essential for using common knowledge during the process, its formation have to respect for their concept about increasing the quality of life.

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## VOLUNTEERING - PREMISE OF HUMAN DEVELOPMENT

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**Abstract:** *In the last decade of the twentieth century, the phenomenon of volunteering began to take shape in Romania. Therefore, it is necessary to study its evolution, the necessary resources, the implications and benefits it brings to society at the collective level but also at the individual level. The purpose of the paper is to determine the degree of involvement of young people in volunteer activities. About volunteering it can be said that it can contribute to the development of young people on several levels: social, psychological, human and why not even economic. In the first part of the present study are presented some theoretical aspects regarding the volunteer activity, and in the second part are presented the research methodology and the results of the data analysis obtained by the method of the sonata and the interview.*

**Keywords:** volunteering; youth; benefits; involvement; impact

**JEL classification:** J31

### 1. Literature review

The European Youth Forum considers that "volunteering activities are not based on profit and appear at the initiative of the volunteer or in an organized setting" (European Youth Forum, 2019). Attractive activities for volunteers are considered the following: sports, social activity, culture, recreation, education (formal; non-formal), vocational training, personal development.

The Explanatory Dictionary of the Romanian Language defines volunteering as follows: "Activity carried out for the benefit of other people or society without pursuing a material gain" (Dex online, 2019). At the same time, the European Youth Forum mentions that an activity can be considered voluntary only if several criteria are met, such as (Center for Research and Consultation in the Field of Cultures, 2018):

- *Own initiative* - a person, without the constraint of external factors, chooses to dedicate his time and energy to meet certain requirements or needs of society and the environment in general, but also in particular at the individual level;
- *Remuneration*- as is clear from the above definition, it is clear that the volunteer does not engage in such activities for the purpose of obtaining benefits of an economic nature, but especially of a social nature (self-esteem, prestige, generosity, appreciation of society, altruism, etc.);

- *Organizational activity*- voluntary activities are usually carried out under the auspices of non-profit institutions, non-governmental organizations.

In order to be able to emphasize the dimension of youth involvement in volunteering activities, it is necessary to make a conceptual delimitation regarding the youth segment. At the Romanian level, there is the Youth Law, according to which citizens are considered young when they are between 14 and 35 years old (Romanian Parliament, 2006).

Regarding the youth segment, it was found that young people seem to prefer informal or unconventional forms of civic and political participation, which best suit their interests and needs. At the same time, their participation is generally separate from any political affiliation. According to a 2015 statistic, about 1 in 4 young people across the European Union have been involved in a form of volunteering. Volunteering is considered to be a sum of values such as: altruism, generosity, social responsibility, altruism (Jardim& Silva, 2018). Approached from a broader perspective, it can be mentioned that volunteering has two main components, namely: the psychological component and the sociological one, respectively. In terms of the psychological component, volunteering satisfies self-esteem, it follows the motivations of the volunteers, and through altruism one individual can differ from another individual who does not practice such activities. From the perspective of the sociological component, the social changes that occur over time are followed, which changes the structure and concerns of the volunteer but also the individual (Jardim& Silva, 2018).

In post-communist Romania, the dictatorial doctrine persisted for a long time in the memory and collective habits, so the values that volunteering implies hardly penetrated the behaviors and new habits of the Romanian society, which can be observed at the statistical level when in 2001, the percentage of volunteers from at least one association was only 8%, the percentage being largely made up of the young urban population modeled on the population of Western Europe (Corduban et al., 2014). According to the National Resource Center for Volunteering of the Pro Vobis association in Romania, there are several traditional events that aim to reward good practices in the field of volunteering: National Volunteer Week, held annually in the third week of May; National Volunteer Gala and other local galas; International Volunteer Day, December 5; International Day of Volunteer Coordinators, November 5 (Pintea, 2019). Any activity that an individual carries out is based on motivation. When it comes to volunteering, the spectrum of intrinsic motivation is dominant. Nowadays, motivation is supported by impulses such as: career development, personal growth, professional experience, the development of new skills and competencies, premises to be able to get a job more easily; new friends etc. motivation is fueled by impulses such as: career development, personal growth, professional experience, development of new skills and competencies, premises to be able to get a job more easily; new friends etc. motivation is fueled by impulses such as: career development, personal growth, professional experience, development of new skills and competencies, premises to be able to get a job more easily; new friends etc.

## **2. Research methodology**

The purpose of this paper is to determine the degree of involvement of young people but also the reasons that determine them to get involved in volunteer

activities, taking into account the main causes for which they choose to fight but also the subsequent benefits they obtain. For data collection through the questionnaire, the target group is young people aged between 18 and 35 years. 76 respondents participated, and the research hypotheses are the following:

1. Less than 50% of respondents do not volunteer;
2. Over 60% of women in urban areas practice activitiesvolunteering;
3. Less than 60% of males in urban areas pravolunteer activities;
4. Less than 30% of all respondents cameand from rural areas he practices volunteering activities;
5. At least 50% of all respondents consider that the principleThe reason for volunteering is to help others;
6. More than 80% of all respondents who do not volunteer invoke insufficient leisure time;
7. Over 60% of undergraduate students practice volunteer activities.

The main objective of the qualitative research method (the interview) is to determine the impact that volunteer activities have on children and respectively how the needs of children can be met through it. The analysis through the interview had as a target group the children from the Day Center "Casa Speranței" - the Directorate of Social Assistance and Child Protection District 4 Bucharest. The interviewee was the director of the center, Salvina Teacă.

### **3. Results**

The majority of respondents (71%) practiced volunteer activities, and 29% of respondents did not practice volunteer activities, so hypothesis 1 is refuted. In the contemporary era, taking into account the fact that the Romanian economy is still in transition and that the era of speed also has negative consequences on people (stress), it is found that people still have a certain dose of interest in volunteering.

The structure of respondents by gender is as follows: 58 of the respondents are female and 18 are male. Also, 42 of the respondents are from urban areas. In order for hypothesis 2 to be validated, 25 of the 42 respondents must have volunteered. The hypothesis is valid, because 29 of the 42 respondents practiced volunteer activities, this means 69%. Also, 13 of the 18 male respondents are from urban areas. In order for hypothesis 3 to be validated, less than 8 respondents must have volunteered. The hypothesis is refuted, as 9 of the 13 respondents practiced volunteer activities, which means 69%.

The structure of the respondents according to the environment of origin is the following: 21 are from rural areas, and 55 are from urban areas. Hypothesis 4 is refuted, as 16 of the 21 rural respondents volunteered, which means 76%.

In order for hypothesis 5 to be validated, at least 38 of the 76 respondents must have chosen to help their peers as the main reason for practicing volunteer activities. The hypothesis is refuted, as 30 respondents chose among their motives the help of their peers, which means 39.47%.

In order to validate hypothesis 6, more than 18 of the 22 respondents who did not volunteer should invoke their free time as a reason that prevented them from carrying out such activities. The hypothesis is refuted, as only 7 of the 22 respondents chose free time as a reason that prevented them from volunteering, which means 32%.

In the structure of respondents by occupation, 32 of the 76 respondents are undergraduate students. In order for hypothesis 7 to be validated, more than 19 of the 32 respondents must have stated that they had volunteered. This hypothesis is validated, as 25 of the 32 undergraduate students stated that they practiced volunteer activities, which means 78%.

Following the application of the interview, several important aspects can be noted in connection with the current perspective of carrying out volunteer activities. Given the category of beneficiaries of the center, the needs are often urgent. Volunteering in such an environment is mandatory to take place over as long a time horizon as possible and to focus on identifying and meeting the most specific needs, thus being able to bring utility to those they target. We can say that volunteering has a fragmented and non-repetitive character, regarding the children from the "Casa Speranței" Day Center.

Also, the volunteer activities in which children are engaged are not focused on specific needs, but rather on meeting some needs that seem to be more important at the general level of society. Students are the essential element in the development of volunteer activities, social and human development, because they create a direct relationship of interaction and communication with children. When an individual does not benefit from optimal conditions of development in the environment in which he is, a form of support is needed, whether it is about certain organizations or it is about various programs that help the development of individuals.

#### **4. Conclusions**

It is found that young people are not very well informed about what volunteering generally means, and especially about the benefits that come from volunteering. It is also found that young people put personal interests (personal development) first and not the causes for which the volunteer activity is carried out. This contradicts the definition of volunteering to some extent, but reinforces the premise that volunteering contributes to the development of young people. Volunteering is a way for young people to learn to communicate better with each other and with society as a whole, as the main competence acquired through volunteering is the ability to communicate. The online environment is the best way to promote volunteering, whereas most young people have heard of such activities through the online environment. It is also noted that student associations are a cornerstone in terms of volunteering, as most young people have volunteered in these associations. A particularly important aspect is that young people are aware of the problems of society, as most young people have said that the feeling that appears when they practice volunteering is the awareness of a problem. It also seems that one of the most important causes for young people to volunteer is the environment, and many young people believe that volunteering should be better promoted. It is found that most young people do not volunteer because they do not have free time, and if they had time to practice volunteer activities, they would be in the field of environment (ecology), and the main beneficiaries would be children. It is also found that over 50% of young people volunteer. Another important aspect is that the percentage of young people in urban areas who practice volunteering is equal (69%). Young people in rural areas are very interested in volunteering, as 76% of them have volunteered.

Another important aspect to mention is the interest in children's ecological activities. Starting from this aspect, the design of volunteer activities can be done with a focus on motor, practical learning, by exposing them to real situations they may face. Also, in order to create and stimulate an ecological behavior, it is necessary to invest in ecological education from an early age, and this process should be continuous.

In other words, volunteering can close the gap on equal opportunities for one another, providing support and solutions for everyone and responding to increasingly diverse needs.

In conclusion, in general, volunteering has many benefits, implications and involves various resources. It can be seen and understood as an engine with alternative fuels that can help society solve various problems, which politics and education can no longer cope with.

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## IFRS 9 - SUPERVISORY EXPECTATIONS AND ACCOUNTING CONSTRAINTS

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**Abstract:** *The paper aims to describe the interaction between accounting standards and supervisory expectations, namely the interaction between IFRS 9 and the three pillars of the Basel III regulation: the minimum regulatory capital requirements (Pillar 1), supervisory review and evaluations process (Pillar 2), and market discipline (Pillar 3). The two key terms of the article: IFRS 9 and Basel III have a major importance in the activity carried out in the banking sector. Although IFRS 9 is an accounting standard, it has a strong impact on risk management and the banking business model. Basel framework is applied on a consolidated basis to all internationally active banks, being the best way to preserve the integrity of capital in subsidiary banks by eliminating double-gearing. The challenge of this article is to understand what mean the interaction between IFRS 9 and the three pillars of the Basel III regulation.*

**Keywords:** IFRS 9; Basel III regulation; pillars of Basel III regulation; interaction; institution; risk

**JEL Classification:** M41; M21

### 1. Introduction

The current environment relies on the accounting and regulatory perspective inter-connections and mutual influence over each other, hence a balance must be achieved in order to ensure the institution's future profitability and, at the same time, to ensure that the capital and liquidity requirements are fulfilled.

Even though the two perspectives require different assumptions throughout the cycle, the objective is the same, respectively to ensure the institution is adequately capitalized to withstand the potential losses which could appear. Furthermore, the accounting perspective interacts with the Pillar 2 requirements as the supervisors evaluate banks' risk management systems, economic capital calculations and capital planning and assess the adequacy of the provision coverage and unexpected and expected credit losses regulatory capital.

Following the Basel Committee on Banking Supervision guidance with regard to expected loss adequacy supervisors can guide the level of the provision coverage

through the requirements set in the Supervisory review and evaluation process under Pillar 2. Furthermore, the loan loss provisions impact the financial statements disclosure, hence impact the third pillar of bank supervision- “market discipline”.

Developed by the Basel Committee on Banking Supervision as a response to the financial crisis of 2007-2009, the regulatory Basel III framework is based on three pillars:

- a) Pillar 1 – representing the minimum amount of regulatory capital that an institution should hold -Kim and Santomero (1988) consider it reduces the risk taking incentives of the institutions, as riskier assets would increase the Pillar 1 capital requirement hence the institution strategy should consider the cost of capital when making investments in riskier assets.
- b) Pillar 2 – supervisory review and evaluation process – enables supervisors to evaluate banks’ risk profile by considering the institution’s business model, governance, risks to capital and liquidity.
- c) Pillar 3 – market discipline – requires financial institutions to ensure transparent reporting which would enables capital markets to serve as a complementary force to discipline banks’ behavior.

## **2. The interaction between IFRS 9 and the three pillars of the Basel III regulation**

Financial reporting, and in particular loan loss provisioning and bank supervision, intersect at all three pillars:

### **2.1. IFRS 9 and bank capital (Pillar I)**

The main building-block of any model (Basel or IFRS 9) is the use of an adequate definition of default, which is consist and comparable across management practices accounting and regulatory requirements should not be conflicting (EBA/GL/2017/07).

The Capital Requirements Regulation (CRR), under article 178, defined the obligor as defaulted if it is more than 90 days past due or if any of the unlikelihood to pay criteria has been met. However, the IASB decided to not provide a definition of default in order to ensure consistency with the credit risk management practices of the institutions (Basis for Conclusions paragraph 5.251). IFRS 9 introduces as a backstop, the rebuttable presumption that default a default can be recognized when a financial asset is more than 90 days past due (paragraph B5.5.37). In practice, large misalignments can be identified within the same institution both across portfolios and between the regulatory and accounting requirements. Furthermore, the treatment across jurisdictions is significantly different.

Under the Basel requirements financial institutions are required to compute the value of the unexpected losses while under the IFRS 9 standard they are required to compute the value of the expected loss. The stage 1 computation of expected credit losses is conceptually more similar to the Basel requirements the losses are computed over a 12-month time-horizon and the key input parameters are the Probability of Default (PD) and Loss Given Default (LGD). Under the Basel requirements the banks using an advanced internal rating based approach (A-IRB) compute their own PD and LGD estimates. While the rating philosophy of the PD model can be either point in time (Pit), throughout the cycle (TTC) or hybrid, the

calibration is required to be TTC estimates at a grade level, the PiT approach assesses an obligor's PD considering the current state of the economy and over a relatively short time-horizon (one year) hence it's more sensitive to the prevailing economic circumstances. While the TTC approach capture a longer time horizon in order to neutralize the cyclical conditions, under the hybrid approach the PD ratings are calibrated to the long run average default rates however, the model can reflect current/PiT macro-economic conditions through grade migration.

Under the IFRS 9 requirements the calibration should be forward looking considering all available information and a range of possible economic scenarios (Basis for Conclusions paragraph 5.282), hence the Basel estimates have to be adjusted in order to become IFRS 9 compliant.

## **2.2. IFRS 9 and bank capital (Pillar II)**

Under the Pillar 2 - framework the supervisory review and evolution process (SREP) - the supervisors assess whether the institutions have an adequate credit risk process. The interaction with the IFRS 9 models is seen from the perspective that the economic capital models presented in the institution's ICAAP (Internal Capital Adequacy Assessment Process) should also be PiT and reflective of an institution's current and expected conditions. The economic capital models are expected to address risk not covered or not fully covered by Pillar 1, hence credit concentration as well as migration risk are considered alongside the risk of default. Consequently the Pillar 2 methodologies address the main limitations of the Pillar 1 methodologies, the Internal Ratings-Based (IRB) models assume infinite granularity of the portfolios and are based on a one factor model.

This limitation could be addressed by incorporating:

- Single name concentration
- Sectorial and geographical concentration
- Migration is incorporated by adjusting the maturity factor in the IRB formula.

Another model that is used by institutions in the ICAAP is the stress testing model, which similar to the IRB, IFRS 9 and economic capital models and is based on the same key parameters (PD, LGD, EAD). However, generally, the stress testing models are top down and are considering significant shocks applied to the macroeconomic variables integrated in the model. If the supervisor's identify significant deficiencies in the institution's management process or in the loan loss provision allowance a Pillar 2 add-on can be imposed.

## **2.3. IFRS 9 and Pillar III**

The third pillar of the Basel framework is seen as a mechanism through which market participants can monitor and reduce the aggressive risk taking practices of the institutions. Stephanou (2010) considers that one of the key characteristics of market discipline is the availability of reliable information in a timely manner. This is very relevant in the context of benchmarking exercise performed by the European Banking Authority (EBA) on the IRB, IFRS 9 and Stress testing exercise.

## **3. Conclusion**

IFRS 9 is seen as significant improvement in the accounting world, thus this paper outlines the interaction between the accounting standards and supervisory expectations, namely the interaction between IFRS 9 and the three pillars of the

Basel III regulation. Also, it highlights where there are deviations between IFRS 9 and supervisory expectations and outlines the justification for the deviation.

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## USING KAHOOT! IN ECONOMICS CLASSROOMS

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**Abstract:** *Gamification methods are an innovative approach that adapts the mechanism of the game in the teaching and learning process in order to increase user engagement and motivation, and provide sustainable learning experiences. In this paper, the author aims to emphasize the potential benefits for economics curricula provided by Kahoot!, one of the most popular game-based learning platform and to explain how to effectively use this game-based student system (GSRS) in a specific economics classrooms. Also, this paper wants to contribute to the reduction of economics teachers' concerns about the use of new technologies.*

**Keywords:** computer technology, educational games, game-based learning, Kahoot!

**JEL classification:** A20, A21

### 1. Introduction

The rapid development of new technologies requires a rethinking of the teaching and learning activities' designs. Nowadays, students are exposed to huge amounts of information, which leads to saturation and the loss of focus on educators' lectures. Teachers are thus challenged to identify ways to capture students' attention during classes (Aleksic-Maslac et al. (2018)). These realities lead to the development of new tools, suitable for 21<sup>st</sup> century learners, that enrich learning processes. Such an instrument is represented by the instructional games, that are gaining more acceptance. The main argument in favor of this tool is the well known fact that gamers can sit for hours without losing significant interest or energy, playing different games (Lee and Hammer (2011)). One of the instructional games that can be easily used to add vitality and student engagement to classrooms and also required limited training for users, is Kahoot!.

### 2. Incorporating Kahoot! in teaching

Kahoot! is one of the most popular classroom response systems (CRS) platforms used to get immediate feedback from students in the teaching process. The implementation forms of CRSs are diverse: question-answer systems, electronic response systems, cloud-based classroom response systems and many others. CRSs were introduced since 1950s and involve different ways of technical implementation, such as: the use of buttons A,B,C,D,E with the possibility to give feedback to respondents on the correct answers by a vibration of the button.

Another design involves the alternative usage of green/red lights to the correct /wrong answer (Judson and Sawada(2002)).

In the teaching process, educators need to adapt their lessons, as content and rhythm depending on the students' response. Nowadays, the fast response from students comes through mobile devices using one of the most popular CRS platforms, respectively Kahoot!. This allows teachers to review content and adjust teaching pace, in view of enhancing students' engagement. Also, it has been shown by numerous researches that the integration of game techniques in a classroom response system leads to increased students' motivation (Bario et. Al(2016), Wang and Lieberoth(2016)).

### **2.1. What is Kahoot?**

The well-known CRS platform Kahoot! was launched in 2013 through collaboration between the entrepreneurs Johan Brand, Jamie Brooker, Morten Versvik and the Norwegian University of Technology and Science, in order to be used free of charge by teachers and students. Using the platform, the students have to select their response options or to improve their scores, using a mobile device (e.g. smartphone, tablet, laptop, desktop) connected to internet. (Gündüz and Akkoyunlu(2020)).

This application has multiple functionalities in learning environment:

- Create teaching resources – game base learning, in a format adapted by the teachers to the specifics of the class;
- Teachers have the opportunity to use different forms of kahoots, depending on the objectives of their teaching activity – quiz (students choose the correct answer from several options), jumble (students place the answers in the correct order), discussion (teachers ask questions that launch a debate), survey (the audience's opinions are required);
- It allows interaction with others users from around the world and sharing experiences – social learning;
- Strengthens learning by recapitulating some contents, even as homework;
- It allows students to be evaluated;
- It provides reports that allowed teachers to analyze students performances.

The arguments for which teachers should use this platform are that Kahoot! is flexible, simple, exciting, motivating, allows various games, global and free.

### **2.2. Related studies**

Research on the use of Kahoot! in the learning environment has focused on how teachers and students perceive this game based platform (Baszuk and Heath (2020), Bicen and Kocakoyun (2018), Wang(2015)). Thus, it was highlighted that the use of kahoots in the classroom will increase student engagement and understanding of course content.

Another topic related to Kahoot! which has been approached by researchers is the one related to the learning effects (Hung(2017), Wang et al.(2016)). Wang and Tahir (2020), in their literature review paper, investigate a numerous studies, comparing traditional teaching to Kahoot! used in the context of flipped classrooms, game-based learning and technology-supported learning. The conclusions were that although all these studies show an improvement in academic results where

Kahoot! was used, as a teaching approach, it was not explain how Kahoot! contributed to this improvement.

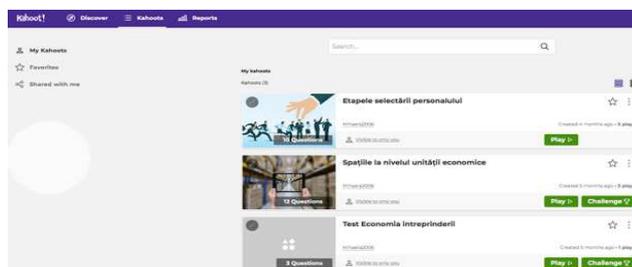
Numerous researchers have highlighted a vulnerability of Kahoot!, also identified by Kahoot! staff, which consists in the anxiety that occurs in some students due to the competitive gaming elements that leads to dramatic decrease in motivation (Zarzycka -Piskorz (2016)).

### 3. Methodology

#### 3.1 Exemplification of using Kahoot – classroom exercise

In order to evaluate the impact of using Kahoot! in the high school we performed an evaluation of some contents, both by kahoot quiz and by the traditional method. This approach was realized in 2019/2020 school year to evaluate students from 3 high school classes in the 9th grade, for the content "Organizing spaces in a company" from "Organization of the enterprise" subject. Kahoot! quiz was applied to 2 classes (experimental group) and the traditional test to one class (control group). The same set of questions was introduced in both Kahoot! quiz and into the traditional paper test.

Regarding Kahoot!, the quiz was assembled from 12 questions, and for each question a student had 30 seconds to answer. This quiz was selected by the teacher from their own archive existing in the user account (Fig.1), the alternative being to create a new kahoot.



**Figure1:** Kahoots archive of the instructor

Before the application of the quiz, the necessary technical conditions were ensured: computer with very good internet connection, projector, all students had mobile phones connected to the internet, through their own connection or provided by hotspot. The students were explained how to use the application and then the teacher started the game by pressing the Classic button (choosing the game option). The start of the game led to the appearance on the screen of the PIN GAME, used by the students for their registration on the platform kahoot.it. Next, the questions appeared successively on the screen (Fig.2), and the answers came from the students by selecting on the phone the geometric figure attached to the answer that was considered correct (Fig.3). Kahoot! counts both the accuracy of the answers and the speed of response.



**Figure 2:** The image displayed by the projector on students's phone



**Figure 3:** The image displayed on students's phone

After completing the game, a statistic (*Report*) is provided to the instructor with a detailed analysis of the answers and a ranking. This report can be accessed later by the instructor, from his account. For the purpose of our analysis, the results (number) of correct answers were converted into grades, each correct answer being worth 0.75 points. Thus, the scale was as follows: 12 questions x 0.75 points/question = 9 points + 1 point.

To compare the results of the two groups, the same test was applied, but in a traditional format to another class. The resulting scores for the experimental and control groups are presented in the following table:

**Table 1:** Results for the scores

Type of evaluation	Number of students	Grades below 5	Grades 5-6,99	Grades 7- 8,99	Grades 9-10	Average Score
Kahoot! Quiz 1st class	25	-	6	13	6	7,52
Kahoot! Quiz 2 <sup>nd</sup> class	22	1	4	13	4	7,63
Traditional test	26	3	8	11	4	6,96

We can conclude that the better test results of the experimental group are due to the interest shown by students for this new way of testing knowledge. The students for the experimental group were more motivated to answer correctly, more competitive, happy to use their dearest device, the smartphone.

### 3.2. Data Collection Tool

A survey form, consisting of five statements, was applied by the researchers to the experimental group. The purpose was to find out the opinions of the students about the use of Kahoot! in classroom activities. Quantitative data were obtained using a Likert-scale with the following options: "Strongly Disagree", "Disagree", "Neither agree nor disagree", "Agree", "Strongly Agree" (Aleksic-Maslac et al. (2018)).

### 3.3. Study Group

The participants from the experimental group consisted of 47 students from an economical high school, enrolled in economic field of qualification. All participants were informed about the nature of the study before the research and participated voluntarily.

### 3.4. Findings

The results of the survey are presented below.

*Motivation – Q1 “I am more motivated when I participate in a Kahoot! game” (Fig.4)*

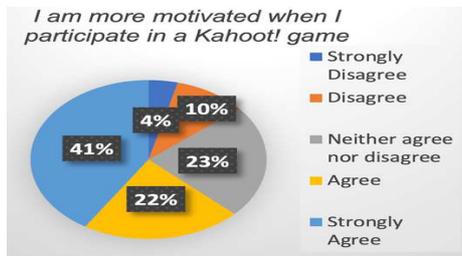
*Competition – Q2 “I feel myself more competitive in a Kahoot! game ” (Fig.5)*

*Anxiety – Q3 “I feel myself anxious when I play Kahoot! game” (Fig.6)*

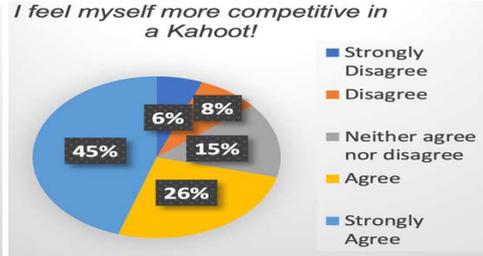
*Engagement – “Kahoot! game increase my learning engagement” (Fig.7)*

*Fun and enjoyment – “I found Kahoot! game fun and enjoyable” (Fig.8)*

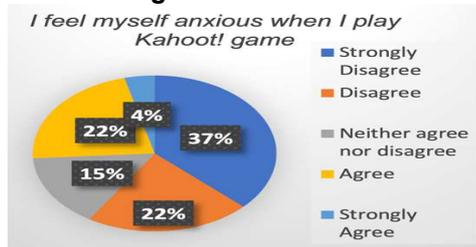
*Learning satisfaction – “I think that Kahoot! game improves my learning activity” (Fig.9)*



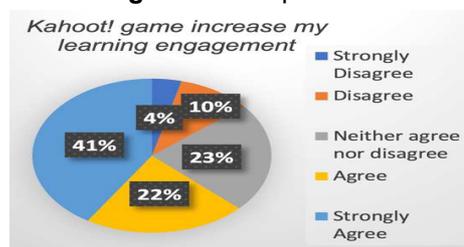
**Figure 4: Motivation**



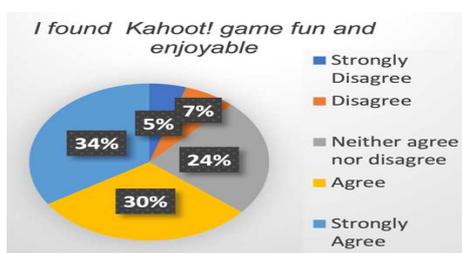
**Figure 5: Competition**



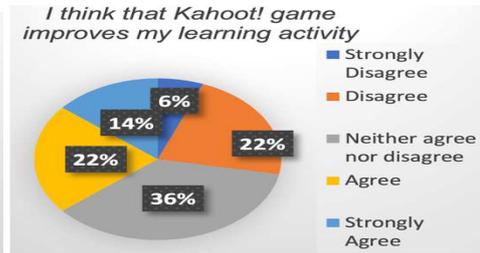
**Figure 6: Anxiety**



**Figure 7: Engagement**



**Figure 8: Fun and enjoyment**



**Figure 9: Learning satisfaction**

The results shows that a very large percentage of students feel motivated (22%) or very motivated (41%) when they participate in a Kahoot! game. Also, a significant number of students feel they are more competitive when the learning activity involves a Kahoot! game (more than 80% agree or strongly agree). The problem raised by the researchers related to the anxiety that the use of Kahoot! can produce, is confirmed here because a significant number of students (36% agree

or strongly agree) confirm the appearance of anxiety, producing negative effects. 64% of the students found Kahoot! game fun and enjoyable and only 20% disagree or strongly disagree that this game improves their learning activity. Thus, it is observed that students are very satisfied regarding the implementation of Kahoot! in class, confirming the higher scores obtained when Kahoot! was applied.

#### 4. Discussion and results

There is an growing interest in understanding how instructors could improve students' motivation and engagement in their learning. Using the technology developments, the new educational games aim to develop students' cognitive, motivational, emotional and social outlook. It was shown in many researches that Kahoot! fosters motivation and engagement through gamification, allowing teachers to provide real-time feedback to students, and to adapt teaching activities based on students' responses to quizzes. However, an analysis is needed on the effectiveness of this tool when is applied to different age groups, or for different teaching and learning activities or, more importantly, to different subjects. In economics classrooms, Kahoot! can be successfully implemented. In this article we discussed such an example in which the Kahoot! game was applied to assess students' knowledge on how is organized space in an enterprise. The scores obtained by the students prove the increased engagement compared to the classical evaluation. Also, the survey results show that participants reported positive opinion about Kahoot! used on "Organization of the enterprise" subject. It is important to mention, however, that further studies are definitely necessary for a thorough understanding of the benefits and limitations of using Kahoot! in the teaching process.

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## COMPARATIVE ASPECTS REGARDING THE ABSORPTION OF STRUCTURAL FUNDS IN ROMANIA

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**Abstract:** *In this article we discuss the cohesion policy of the European Union, which is the most important source of support for regional development. At European Union level, more than half of the funding they allocate is provided through the Structural and Investment Funds, which are the instruments of cohesion policy. The ESI Funds (European Structural and Investment Funds) have a total budget of EUR 454 billion for the period 2014-2020, representing the main investment policy instrument at EU level. Cohesion policy for the multiannual financial framework 2021-2027 must respond to prerogatives such as a smarter, greener, more connected, more social Europe and, last but not least, closer to its citizens. In this sense, European Union investments will focus on the areas that will bring the most added value.*

**Keywords:** structural funds, cohesion policy, investments, absorption

**JEL classification:** F02, F15, F63

### **1. Introduction**

The Structural and Investment Funds are managed by the European Commission together with the Member States. At the level of the European Union, through the use of these funds, the aim is to obtain: more jobs, a common and solid European economy, as well as a healthy environment. Through these objectives we want to achieve the EUROPE 2020 Strategy. The Cohesion policy has been one of the central elements of the process of building the European Union as we know it today. In this sense, better regional development requires better governance that guarantees the cooperation of socio-economic partners with civil society in order to increase the competitiveness of the European Union and solidarity between its regions.

### **2. Methodology**

Regarding the research methodology that I used for this article, I want to remind you that I started from bibliographic and webliographic documentation from books, national and international articles or various current studies in the literature, being absolutely necessary to know national and international context. A real benefit for the research activity necessary for this article, as a source of information, were the direct discussions with various researchers and specialists in this issue. At the same time, we took into account the statistical reports provided by local and national bodies and last but not least those at European level.

### **3. Literature review**

Cohesion policy aims to reduce economic and social disparities between its regions. The most important instruments through which this objective can be achieved are the structural funds. Given the size of allocations in the structural funds, their influence was characterized from several points of view. One of these concerns their ability to stimulate economic growth and regional development (Martin, 1997; Cappellen et al, 2003; Sapir, 2003; Ederveen et al, 2006), another view refers to their ability to generate value added (Bachtler & Taylor, 2003) or their influences on business modeling (Midelfart-Knarvik & Overman, 2002). What is certain is that the Structural Funds have been the focus of all European discussions and have come to be considered the key to overcoming economic crises.

Although there is no generally accepted opinion, the literature shows that the degree to which European funds can be absorbed by Member States depends on the following factors (NEI, 2002; Sumpikova, Pavel and Klazar, 2003; Osterloh, 2010; Constantin, Goschin and Dragan, 2011): administrative absorption capacity (related to the performance of public administrations at central, regional and local level, program design, project evaluation, coordination assurance between main partners and financing and implementation oversight, which means the management of a large amount of administrative activities), macroeconomic absorption capacity (the ability to generate sufficient investment opportunities to use European funds in an efficient way) and financial absorption capacity (the ability to co-finance these programs by the initial guarantee with funds from the national budget; moreover, it implies the collection of contributions from private or public partners interested in working on joint projects).

Whether we analyze the impact that structural funds have, the usefulness they offer or even the definition of how to organize, they are the subject of long controversies.

### **4. Comparative aspects regarding the absorption of structural funds in Romania**

The multiannual framework 2007-2013, exactly after Romania's accession to the European Union, was characterized to the greatest extent by the difficulty with which these structural funds were absorbed. The appearance of the global economic crisis also had a great influence and due to which the lack of cash resources intervened, which ensured the co-financing of these funds, but also the inability of the public authorities to work with them. The amounts allocated to Romania in the financial framework 2007-2013 amounted to EUR 19.21 billion. If we refer to the number of inhabitants, we notice that Romania actually benefited from less than 1000 EUR / inhabitant. This is the lowest level that any EU Member State has benefited from compared to other Central and Eastern European countries.

Romania received from the European Union 32512.67 million euros, of which 21086.86 million euros between 2007 and 2013 and the amount of 11425.81 million euros from 2014 until the end of 2015. Of these, the amount of 13558.77 million euros represents amounts collected from structural and cohesion funds (FSC), representing 41.70% of the total revenues, from funds for rural development and fisheries (EAFRD + EFF) 7734.02 million euros representing 22,18%, from the

European Agricultural Guarantee Fund (EAGF) received 7389.48 million euros, ie 22.73% and from other funds and pre-financing 4361.69 million euros with a percentage of only 13.42%.

**Table 1:** The amounts collected by Romania from the EU budget on account of the allocations for the 2007-2013 framework (million euros)

Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	TOTAL 2007-2015
Amounts from the EU budget	<b>1599.71</b>	<b>2642.34</b>	<b>2930.24</b>	<b>2293.63</b>	<b>2621.59</b>	<b>3442.13</b>	<b>5557.21</b>	<b>5932.51</b>	<b>5493.30</b>	<b>32512,67</b>
A.Pre-accession funds	812.26	747.68	618.74	273.17	132.61	43.90	31.02	19.25	29.33	<b>2707.96</b>
B.Post-accession funds	787.45	1894.67	2311.50	2020.46	2488.98	3398.24	5526.19	5913.26	5463.98	<b>29804.72</b>
B1.FSC	421.38	648.45	917.84	505.54	708.36	1170.92	2963.12	3587.61	2635.56	<b>13558.77</b>
B2.FEADR+FEP	15.13	578.75	565.93	760.48	883.05	1090.05	1229.99	841.02	1247.35	<b>7211.73</b>
B3.FEGA	6.89	461.87	575.93	663.78	768.95	991.27	1174.70	1325.84	1420.24	<b>7389.48</b>
B4.Other(post-accession funds)	344.05	205.60	251.80	90.65	128.62	146.00	158.38	158.79	160.83	<b>1653.73</b>

Source: Own processing based on data provided by the Ministry of European Funds, <https://www.fonduri-ue.ro/>

From data presented in the table above it appears that the absorption of European funds increased in the period 2007-2015 reaching from 1599.71 million euros in 2007 to 5932.51 million euros in 2014 and 5493.3 million euros in 2015. The structural and cohesion funds have a constant evolution, being on a downward slope only in 2010 and 2015, reaching from an absorption degree of 421.38 million euros in 2007 to 3587,61 million euros in 2014. EAFRD + EFF have a constant increase until 2013 meeting only in 2014 a decrease and in 2015 it recovers reaching a maximum for this period of 1247.35 million euros.

**Table 2:** The balance of financial flows between the Romanian budget and the EU budget (million euros)

Name	2007	2008	2009	2010	2011	2012	2013	2014	2015	TOTAL 2007-2017
Received from EU	1599.71	2642.34	2930.24	2293.63	2621.59	3442.13	5557.21	5981.02	6438.42	<b>33506.30</b>
Paid to the EU	1150.89	1268.93	1364.43	1158.91	1296.24	1427.77	1534.77	1619.89	1456.25	<b>12278.09</b>
<b>Balance of flows</b>	<b>448.82</b>	<b>1373.41</b>	<b>1565.81</b>	<b>1134.72</b>	<b>1325.35</b>	<b>2014.36</b>	<b>4022.45</b>	<b>4361.13</b>	<b>4982.17</b>	<b>21228.21</b>

Source: Own processing based on data provided by the Ministry of European Funds, <https://www.fonduri-ue.ro/>

As it appears from the balance of financial flows between the Romanian budget and the EU budget, our country is a real beneficiary of these allocations due to the fact that the revenues it registered are 272.90% higher than the payments it made to the EU budget. Thus, Romania collected in the period 2007-2015 33506.3 million euros and paid only 12278.09 million euros resulting in a surplus of 21228.21 million euros.

Romania had an allocation of 19,213 million euros for structural and cohesion funds for the multiannual financial framework 2007-2013. Until 31.12.2013, it

managed to collect from the EU 6430 million euros, ie a percentage of only 33.47% of the allocations, including pre-financing. Until 31.12.2015, Romania managed to collect 14161.69 million euros through the operational programs, having a current absorption degree of 74,31%.

**Table 3:** Comparative analysis of operational programs for MFF 2007-2013 and 2014-2020 (million euros)

Structural and Cohesion Funds	Allocations	Payments to beneficiaries	% 4=(3/2)*100	Curent absorption	% 6=(5/2)*100	Effective absorption	% 8=(7/2)*100
1	2	3	4	5	6	7	8
Operational programs 2007-2013	19213.00	7006.98	36.47%	6430.00	33.47%	5089.00	26.49%
Operational programs 2014-2020	30882.65	11743.62	38.03%	10953.10	35.47%	10232.55	33.13%
Absolute difference	+11669.65	+4736.64	-	4523.10	-	5143.55	-
Relative difference	+60.74%	67.60%	+1.56%	-	+2.00%	-	+6.64%

Source: Own processing based on data provided by the Ministry of European Funds, <https://www.fonduri-ue.ro/>

Romania in the period 2014-2020 is the beneficiary of an allocation of EUR 30.88 billion from the structural and investment funds allocated by the European Union. To this allocation is added the national contribution, which amounts to EUR 5.88 billion. Thus, Romania's total budget for investments in various areas that these funds consider eligible amounts to EUR 36.77 billion.

As it appears from the data presented in the table above, the evolution of the operational programs from one multiannual financial framework to another is a positive one. Meaning that the total allocations for the operational programs increased 11669.65 million euros, an increase of 60.74%. Payments to beneficiaries increased 67.60%, an increase of 4736.64 million euros. at the same time, the current absorption rate increased by 4523.10 million euros, while the effective absorption rate increased by 5143.55 million euros. However, it is observed that the current absorption rate has increased by only 2% and that of effective absorption by only 6.64%, which is a major problem in terms of absorption of structural and cohesion funds. There is a very large discrepancy between the increase of the allocations from these sources and the capacity with which we can infuse them in the national economy. I mention that for a more conclusive analysis we took into account the payments up to 31.12.2013 for CFM 2007-2013 and the payments up to 01.06.2020 for CFM 2014-2020.

## 5. Conclusions

Romania has received recommendations from the European Union to improve the absorption rate of European structural and investment funds, regarding the application of another implementation methodology that involves the clear definition of a system of fixed rates for indirect costs at project level , increasing the compatibility between European and national regulations, defining direct costs in

national regulations, much more efficient communication between audit, management, certification authorities in the national interest, harmonization of joint actions financed by operational programs, increasing implementation and legal certainty for project promoters, multiannual budgeting to ensure co-financing of European non-reimbursable projects.

At the same time, Romania must develop new methods for implementing these structural funds that will lead to an increase in the quality of life in Romania. This can be achieved through a sharp increase in the actual absorption of the amounts allocated by the European Commission. At the same time, a much more rigorous selection of projects to be financed is needed, in the sense that they must bring considerable added value to the market both economically and socially.

It is also necessary to eliminate asymmetries between the economies of the Member States. Asymmetry which is also generated by the fact that countries with different levels of development benefit to different degrees from the advantages of belonging to the community space.

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## DIGITAL ADVERTISING EVOLUTION THROUGH WORLD WIDE WEB ERAS

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**Abstract:** Digital technology has redefined and dramatically changed the way companies interact with potential clients, respectively consumers, by means of the digital promotion. Digital promotion, a new concept with a relatively short evolution from a chronological point of view, but extremely intense, has contributed to the alteration of the entire perspective, structure and practice in terms of global promotion. From the launch of the World Wide Web in 1991 to the period further referred as the “Banner era” or “social era” of 2005-2008, it has emerged, as we call, the “modern era”. Hence, the purpose of this research is to fully perceive the evolution of digital promotion from both a social and historical perspective, broaching each stage closely, pointing out its own characteristics, foraying into the literature based on the three major stages of Internet evolution. We opted for the review of the relevant literature as research method, being the overview type, i.e. a summary of the relevant literature.

**Keywords:** digital advertising; evolution of digital advertising; world wide web, Web 1.0, Web 2.0, Web 3.0

**JEL classification:** M37; L86

### 1. Preamble

Digital promotion, according to Andrew John McStay, author of Digital Advertising, “an expression used to refer to advertising that involves a computational network” (McStay, 2016, p.2) has deeply altered the entire structure and practice of classic promotion, continuing to alter it at an increasing pace. The time of the emergence of digital promotion and the point of reference in its history is marked, in the literature, by the launch of the World Wide Web in 1991. (McStay, 2016, p.11) Pursuant to the Cambridge Dictionary, Word Wide Web (www) represents, in concrete terms, the whole system of connected documents on the Internet, in the form of images, videos or sounds that can be searched and accessed on the Internet, by a web browser to obtain information on a particular subject, “the system of connected documents on the internet, usually with pictures, video and sound, that can be searched for information about a particular subject” (Cambridge University Press, 2020) .

The moment of the appearance of digital promotion and the landmark in its history is marked, in the literature by the launch, in 1991 of the World Wide Web. (McStay, 2016, p.11) According to the Cambridge Dictionary, Word Wide Web (www) represents, concretely, the entire system of documents connected with the help of the Internet, taking the form of images, videos or sounds that can be searched and accessed on the Internet, with using a web browser to obtain information about a

particular subject, "the system of connected documents on the internet, usually with pictures, video and sound, that can be searched for information about a particular subject" (Cambridge University Press, 2020) . Above all, the World Wide Web was originally built specifically for human consumption, says Ora Lassilaora, an employee of the Nokia Research Center and Ralph R. Swick of the World Wide Web Consortium in the Resource Description Framework (RDF) Model. and Syntax Specification (The World Wide Web Consortium, 1999). This information is written using Hypertext Markup Language (HTML): "a way of marking text so that it can be seen on the internet" (Cambridge University Press, 2020). With its help, web pages are created, pages produced by publishers that host exactly the digital promotion. In this context of the World Wide Web, the literature in this area identifies four major stages of development: Web 1.0 as a network of information connections, Web 2.0 which is deemed as a network of human connections, Web 3.0 - a knowledge network marking the interaction between the human being and artificial intelligence. An evolution of these stages and the transition from Web 1.0 to the role of Web 3.0 is underlined in one of the publications "International Journal of Web & Semantic Technology (IJWesT) Vol.3, No.1, January 2012", namely, "Evolution Of The World Wide Web: From Web 1.0 To Web 3.0", a work authored by specialists in the field: Sareh Aghaei, Mohammad Ali Nematbakhsh and Hadi Khosravi Farsani. The work reviews the respective stages, highlighting the characteristics and implications of each period.

## **2. The very beginning. Web 1.0**

Unlike the subsequent stages, Web 1.0 was uni-directional: "Web 1.0 was mainly a web only in reading" (Aghaei, Nematbakhsh, Farsani, 2012, p.1), thus, its consequences in the area of promotion are basic. According to the literature, the main purpose of the sites that formed Web 1.0 consists in the availability and accessibility of online information, for anyone at any time. Thus, the companies could provide by it, promotional materials such as the classic ones, these only giving the possibility to be read by consumers, the company-consumer relationship ending at this point. The main types of promotional materials used in the Web 1.0 "era" were banners. It is precisely for this reason we referred to this period as the "digital banner period".

At the same time, the key moment deemed by other specialists as the starting point as regards the emergence of digital promotion is the year of 1994. According to Kaye Barabara and Norman Medoff, in the book entitled "Just a Click Away: Advertising on the Internet" 2001, quoted in David S. Evans's work, "The Online Advertising Industry: Economics, Evolution, and Privacy," the online promotion started in 1994, when the Internet users reached the threshold of 25,454,590 (Internet Live Stats, 2020), a value that represents 0.45% of the total human population worldwide. This moment is marked by the sale of the first banner ad in the online environment by the HotWierd web magazine to AT&T.

## **3.The golden age. Web 2.0.**

The second major stage, further referred as the golden period of digital promotion, is the period that comprises the most relevant events identified in the literature, triggered by the sale of the first digital banner and up to now. This period

corresponds chronologically and considering the possibilities provided by the Internet to what specialists call Web 2.0. In *Understanding Web 2.0*, published by Murugesan, San and published in *IT Professional Journal*, Web 2.0 is described as a participative web, "Web 2.0 is also called the wisdom Web, people-centric Web, participative Web, and read/write Web." (Murugesan, 2007, p.34) Its emergence greatly impacted the company-customer interaction, the promotion being viewed in this context from a new perspective.

Analyzing in parallel the number of Internet users from the establishment of Web 2.0, according to Internet Live Stats, a page that provides real-time data on Internet services and part of the Real Time Statistics Project, we note that, starting from 0.45% reached during the first years after the arrival of the Internet, a percentage of 25.8% (International Telecommunication Union, 2016) of Internet users from the total human population was attained in 2009. 10 years later, a new level is detected. The number of users of the total global population records, in 2019, the percentage of 58% (We are Social Ltd., 2020). Moreover, a series of studies and statistics compiled by Emarketer on 2019 reveal that, in terms of digital promotion and the percentage it represents in the total general promotion differs from country to country, being recorded levels such as: 69.5% in China, 66.4% UK, 66.5% Norway (Emarketer, 2020).

Hence, as regards Web 2.0, it is precisely essential to point out the following steps in order to comprehend the evolution of digital promotion. The trade in digital banners, initiated in the Web 1.0 era, enhances its activity in the second era, when users have the opportunity to interact with that banner, accessing the site behind it. Thus, in 1996, according to David S. Evans, Procter & Gamble signed, following several negotiations, a contract with Yahoo, giving rise to the so-called "CPC", known as the cost per click, Yahoo, being paid only when the user clicked on the ad. Gradually, the traditional methods of promotion were later mirrored on the web, developing at an ever-increasing pace. The year of 1998, pursuant to the official results (Google, 2004), is represented by the appearance of the main player that dominates even today the digital promotion industry, Google. In the field of online promotion, Google Adwords is launched 2 years later, presented in the work of Harold Davis, Google Advertising Tools as one of the elements that radically changed the online promotion: "Google's AdWords program and contextual and CPC advertising, in which the advertiser pays by the click, have also revolutionized advertising." (Davis, 2009, p.8) From that year, online promotion underwent new development possibilities.

During the same time frame, due to the widespread use of the Internet, investors turned their attention to companies that were active or promoted their services online. Endeavoring to make a huge profit overnight and being attracted by the enormous potential, a huge flow of capital was directed to any start-up, ignoring fundamental attributes and acting without too much reasoning, actions which contributed to the emergence of "Dot com Bubble" which represented a rapid increase on the US stock of the listing of these companies, followed by an equally steep and sharp decline.

Social platforms have emerged one by one, representing new channels of promotion. Facebook, Twitter, Youtube, Snapchat. All these networks have come to represent for companies extremely important tools used for promotion purposes. M.E Shinnawt and M.L Markus exemplify in their work: "The poverty of media richness theory: explaining people's choice of electronic mail vs. voice mail." the

challenge faced by marketing specialists, namely: determining the most effective channel, respectively means of communication to reach the target audience: "Social media platforms play a major role in distributing a company's messages to their target audience. Since the digital platforms have become so prominent, a channel selection has become an important area of study for marketers to determine the most efficient and precise medium of communication to transmit a message" (Shinnawy, Markus, 1997, p.443)

#### **4. The internet of things. Web 3.0**

A new paradigm in web interaction is deemed by scientists to be the Web 3.0 era. The work "Incremental Journey for World Wide Web: Introduced with Web 1.0 to Recent Web 5.0" by Karan Patel, the following specification is laid down with reference to the appearance of Web 3.0: according to Nova Spivack, "Web 3.0 a phrase coined by John Markoff of the The New York Times in 2006 is the third generation of the World WideWeb, usually conjectured to include semantic tagging of content." (Patel, 2013, p.412). Thus, as applications become more intelligent, providing better search functions and delivering to the user exactly what is within its search range, it results that the goal of Web 3.0 has been achieved. The implications of the promotion during this time span are marked by the emergence of IOT (Internet of Things), voice technology and artificial intelligence, all designed to provide personalized and relevant ads for the user, regardless of the device used.

#### **5. Conclusions**

This paper aimed to outline a general framework for the development of digital promotion, having as reference periods the arrival of the Internet, respectively the starting point, namely Web 1.0, the period that experienced the fastest development, respectively 2.0 and last but not least the development of the promotion digital reached in this stage, falling within the Web 3.0 era. Thus, it is concluded that the evolution of digital promotion has been an alert one, although recent from a chronological point of view. The progress made so far tends towards the mass use of artificial intelligence technology, contributing to a much deeper customization of the interaction with the consumer. Subsequent papers will focus on the transition from traditional marketing to digital marketing, conducting more in-depth research on the key concept of this paper.

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## CREATIVITY AS A NEOFACTOR OF PRODUCTION

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**Abstract:** *The present paper aims to examine what are the established production neofactors and how could creativity fit between them. It is based on a theoretical research, having a big impact in the macroeconomics and psychology field, especially on growth theories that are based on innovation. The purpose of the paper is to find if creativity could generate economic growth or does respect a set of given conditions that make the concept identifiable as a production factor. The findings of the paper imply that creativity is a precursor of innovation, being also quantifiable and having a price, when it is used as a production factor. Creativity is presented here firstly as entrepreneurial creativity, being the main generator of organizational results and performance (measured as “level of new combinations” or “financial performance”) and after as an intermediary of innovation (one of the principle parameters of economic growth), conceptualized as a production factor itself, due to its properties.*

**Keywords:** economic growth; creativity; factors of production; neofactors of production; innovation, technological progress.

**JEL classification:** O35; O30;

### 1. What makes a production factor?

The factors of production are equivalent to the inputs of the production process, although the term is usually used for a wider category, especially land, labour and capital. Economic growth is defined in (Law, 2009) as the increase in the output of an economy, usually expressed in terms of the growth of national income.

Confronting these two definitions, we observe that the factors of production are those that exceed the formation of the dependent parameter of a production process, i.e. the formation of the output of that production process.

Economic growth refers to the introduction of a parameter that allows to increase the result of the production process by modifying the impact of the above-mentioned production factors on the result of the production process.

In classical theories of economic growth, the main factors of production are labour, land and capital while economic growth was based on increasing productivity.

## **2. Factors of production vs factors of economic growth.**

The main factors of production according to (Dransfield and King, 2017) are: labour, land, and capital, by which we mean all goods that are used for the production of other goods and have gone through a production process.

The main parameters of economic growth, found in classical neoclassical and evolutionary theories of economic growth, are: Capital increase, from the AK model (Romer, 1986; Lucas, 1988), Creative destruction (Schumpeter, 1934), Horizontal innovations, from Romer's model (Romer, 1990), vertical innovations (Reinganum, 2014) (Aghion and Howitt, 1992) and repetition learning (Arrow, 1962).

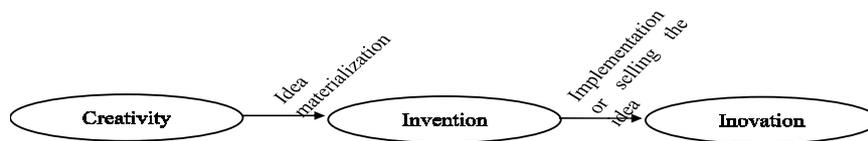
## **3. Neofactors of production**

Neo-factors of production are factors of production which have not been recognized in classical, neoclassical or evolutionary models of economic growth as classical factors of production, but which meet a number of criteria which validate them in the sphere of factors of production.

In (Stern, 2012) *energy* is introduced as a factor of production. *Entrepreneurial capital* is also considered another growth parameter, as in the empirical research found in (Weitzman, 1974) or (Baumol, 1996)(Acs *et al.*, 2018). Schumpeter correlated economic growth with the existence of energetic entrepreneurs (Schumpeter, 1934). In (Acemoglu and Johnson, 2005), entrepreneurial activity and the structure of institutions are also correlated with economic growth. (Audretsch and Keilbach, 2004) introduces the concept of entrepreneurial capital as the endowment of a region with factors that lead to the creation of a new business. In (Bergeaud, Cette and Lecat, 2018), it is shown that the level of *education* was the one that had a significant impact on economic growth, while technology transfer had a moderate impact on it. Another factor of production introduced in (Levin and Scherer, 1986) is the *technological level*. Thus, the closer a company is to the technological barrier, the less resources it needs to innovate.

## **4. Innovation, invention and creativity**

In his book, Schumpeter makes a clear distinction between invention and innovation (similar to (Nathan, 1979)), the implementation of the invention being a condition for the achievement of innovation. After the innovation, in the Schumpeterian vision, the commercialization phase follows. The difference between innovation and creativity is highlighted in (Williams and McGuire, 2008; Hall *et al.*, 2019), where innovation is built in two stages, the first being the driving force of "economic creativity", and the second, implementation, driving innovation. Economic creativity is defined as creativity that produces results capable of having "potential economic value" and also includes two stages, namely the research phase and the idea generation phase (Howell and Higgins, 1990; Thomas, 1996). Amabile, as a pioneer of individual and organizational creativity, marked creativity as a precursor to innovation (Drucker, 1988).



**Figure 1:** The process of generating innovation

### 5. Creativity in economic theories

In (Heunks, 1998), Heunks demonstrates empirically that creativity determines the success and innovation of enterprises. From the theories that support the importance of creativity in economic development we mention the concept of entrepreneurial creativity, determined by the relationship to social networks, vigilance to opportunities, prioritization of knowledge and previous opportunities, which determine the associativity and dissociative thinking (Ko and Butler, 2007).

"The role of creativity in innovation and success increases throughout the life cycle of the company" (Heunks, 1998). In (Sternberg and Lubart, 1991, 1992, 1996), Sternberg and Lubart build creativity as an investment, on the principle that a creative idea has a low price at first, but as it develops and turns into invention and innovation, it exponentially increases its value. In (McMullan and Kenworthy, 2015), McMullan and Kenworthy introduced a general theory of entrepreneurial creativity that represents entrepreneurial creativity as the main generator of organizational results and performance (measured as "level of new combinations" or "financial performance"). Within this theory, creativity is defined as a set of the following values: intelligence, personality, motivation, thinking styles and knowledge. In (Khan, 1986) there is empirical evidence that shows that the most important determinant of business success is the creativity and ingenuity of the entrepreneur.

### 6. Creativity as a neofactor of production

In order to be able to validate creativity as a neofactor of production, we will analyze the observance of the six criteria introduced by Berczi in (Berczi, 1985). In combining creativity with other classical factors of production, such as labor, land or capital, or with other neofactors of production, such as accumulated knowledge or managerial capacity, we identify an increase in economic results due to the restructuring and development of new methods of associating these factors of production. Creativity prices are expressed both in the increases granted to research workers, those who have generated creative ideas with economic potential, in the awards given to creativity or innovation competitions for the general public or employees and in the cost of programs to increase employee creativity. Supply of creativity comes from individuals who have creative training in the field of activity, or from creativity development programs. The demand for creativity comes from entrepreneurs who want to improve or innovate the current production system, the products or services offered, the organization of the company or the restructuring of the target market, through methods that are not standardized. Organized markets for the sale and purchase of creativity are categorized into: the labor market in mainly creative or cultural fields, the market for creativity and personality development programs and the market for innovation competitions. Employee use of creativity decreases when the appreciation of

creative ideas decreases in intensity. Thus, as the volume of creative ideas increases, coming either from a single individual or through the accumulation of the ideas of several individuals, their marginal utility decreases, respecting the principle of decreasing marginal productivity.

## 7. Conclusion

The factors of production are distinguished from the parameters of economic growth, in the sense that a parameter of economic growth is not necessarily a factor of production. Within endogenous, exogenous or evolutionary theories, creativity can be approached as a parameter of innovation, necessary for the generation of economic growth. As this approach does not fall under the umbrella of production factor, we resorted to the identification of neofactors, as well as the criteria for validating a new factor of production. Thus, creativity is not a factor of production associated with classical neoclassical and evolutionary models, but is a factor of production associated with the theories of neofactors of production.

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## THE CLIENT, IN TERMS OF RELATIONAL CAPITAL, AN IMPORTANT ELEMENT TO START KNOWING THE HUMAN CAPITAL VALUE

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**Abstract:** *There are two types of factors, internal and external ones, on which the company objectives are oriented. One of the external factor is relational capital, which is given increased attention in choosing, maintaining and satisfying its needs. The relational capital influences are manifested on the entire company activity. One of the internal factors, another important resource is human capital. Through knowledge, attributions and competencies, human capital determines added value to client and company. Thereby, the relation between human and relational capital is crucial for the company, because the lack of a harmonious relation determines the non-functionality at maximum levels of all other company assets. Knowing the profitability of the service provided, determines the knowledge of human and relational capital. The research objective is to determine the current situation of companies regarding the ways of measuring profitability per customer and to identify the respondents' perception regarding the importance of measuring the performance of human capital in companies of providing services. The research is based on the qualitative method, the interview. From the answers received from the respondents who works in the economic environment, it was established that measuring the human capital performance is the "the intern secret of success".*

**Keywords:** Human Capital, Relational Capital, Human Capital Profitability, Relational Capital Profitability

**JEL classification:** A10, M40, M50

### 1. Introduction

Based on the literature review, the article focuses on the following relevant parts on the relation between human and relational capital in companies of providing services: the importance of measuring human capital, human capital knowledge through relational capital, the existence of a model at company level, calculation of the profit brought by the employee per service provided. Thereby, it is wanted to identify if the companies benefit from a model for calculating the profit brought by each employee. By implementing such a calculation model, each company gets to know its directly productive staff, and the implementation of a model determines the achievement of all proposed objectives. The research aims to determine if the profitability per client knowledge represents an important element in identifying the employee monetary value and the evaluation of his evolution. It is important to determine if employees know the value they have in companies and also if they know the value they bring to the company in which they perform their work through

knowledge, skills and abilities. The measurement, evidence and analysis of such information are necessary for a knowledge of the employee and the customer. The relation that is established between the customer and the employee is an important one, because its results can help determine the employee value.

## **2. Literature Review**

A significant number of studies found that intellectual capital is the most important element that it playing critical role to increase the organizational performance (Khalique Muhammad et al., 2011). In a knowledge economy, where the intellectual capacity of the workforce makes a difference, companies must rely on the workforce with human capital attributes to achieve superior performance (Muda Salwa et al., 2015). The intellectual capital structure is given by human, organizational and structural capital (Mouritsen Jan et al., 2001). Given the fact that there is no monetary value of the intellectual capital components, it was wanted to determine whether they directly or indirectly influence the performance of a company (Khoirunnisa Azzahra, 2018). It focuses on what the components of intellectual capital act on, on the competitive advantage or company performance (Khoirunnisa Azzahra, 2018). Tom Stewart (Chen and Pheng, 2004:1) warned companies not to focus on what they have, but on what they know: "intellectual capital to gain competitive advantage" (Chen Goh P. and Pheng Lim K., 2004).

Compared with human capital and structural capital, relational capital (customers) directly influences the value acquisition for the company (Taghieh Mohammad Bagher et al., 2013). Productivity is the result of the ratio between results and resources (Byus Kent and Lomerson William L., 2004). Focusing on customers, the integrated effort of the organization and long-term profitability (Byus K., et al, 2004, pg. 13) represent the attention that each company has on guaranteed earnings. Theoretically, intellectual capital is based on strategic resources (Gogajeh Hosseinzadeh H. et al., 2015), and the way in which they are used materializes in the company's performance. The attention of companies on the image both internally and externally shows the growing interest in labour satisfaction in the same way that organizations collect information for customer satisfaction (as part of relational capital) (Roslender Robin et al., 2015). As Kaplan & Norton called the "holy grail of accounting" (Kaplan Robert and Norton David, 2004), the allocation of a value to intellectual capital (especially human capital) is a valuable accounting value.

## **3. Research Methods**

The research was based on interviews given to Romanian economists, who work in large companies. They occupy management and operational positions. A sample of 7 people working in the economic field, in the private environment, with operational positions (2 respondents) and management positions (5 respondents) was covered. It was wanted to identify their perception on the current position of the employee's knowledge in relation to the client, in the companies where they work. Due to privacy policies, the names of respondents will not be disclosed. Thereby, they will be presented as E.L. 1 and E.L.2 (for employees holding operational, entry-level positions, and having less than 3 years of experience in the economic field) and M1 to M5 for the rest of respondents.

Two questions were needed to know objectively the respondents. The results show that 57.1% of the respondents occupy executive positions and 42.9% management positions. They have experience from 1 year to 30 years in the economic field.

#### **4. Findings**

*Q1: Does the company you work for, benefit from an employee profitability calculation model?*

M.6: Calculation exists only for directly productive staff who provide services to the customer

M.4: It is a relatively young company, and I want to implement such a model. E.L.1: At the beginning of the year, a series of objectives are set and at the end of the period, the degree of their fulfilment is established.

M.2: Yes- Efficiency and professionalism are the criteria based on which it is calculated how profitable an employee is.

M.3: Personally, I keep track of all income and have a database where I can see at any time and even in detail all the necessary figures

M.6: answered with "Yes", from references" and E.L.2 with "No".

*Q2: Do you consider it necessary to know the profitability brought by the employee for each service provided?*

M.4: Not profitability, but employee value.

E.L.2: I would not want to know my profitability in the company because that would make me think that I am seen as an expense.

E.L.1: Yes, it is necessary.

The rest of respondents answered with "Definitely yes".

*Q3: How do you see it possible to evaluate the employee's performance in relation to the customer?*

M.3: The employee's skills help us to have an overview, the way a project goes shows us how the manager and the team relate to the client and annually we can probe the opinion of the direct beneficiary regarding the delivered services / products.

M.6: Depending on the income brought

M.4: By evaluating the degree of customer satisfaction.

M.5: From results and references

E.L.1: Timely completion of tasks, response time, involvement.

E.L.2: Within the company I work for, the good relationship with the clients is appreciated.

M.2: By supervising the relationship between the employee and the client.

*Q4: Do you consider profitability per customer an important element in identifying the monetary value of the employee?*

E.L.1: Yes, it can be a good element.

M.2: I think is in a very close relation

The rest of respondents answered with "yes"

#### **5. Conclusions**

This study case is a start in identifying the importance of human capital for companies. Within the companies of providing service, the customer represents an important element in determining the employees value, due to the direct relation

between them. The results show that a model of knowledge the client and the employee, does not exist in all companies This determines that employees do not know their own contribution, and the employee does not know enough the each employee's contribution to the company's profit. An interesting result found after the answers received was that those in the entry-level, directly productive employees, do not know the value they bring to the company. The performance and profitability between these two intellectual capital components must be measured in order to identify possible gaps in the company's activity.

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# QUALITY MANAGEMENT IN SPORTS ORGANIZATIONS DEPENDING ON STAKEHOLDERS SATISFACTION AND EXPECTATIONS

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**Abstract:** *It is becoming more and more important for sports organizations the offer to be directly depending on quality. Managers have to give more, even if they get less benefit, and they have to be increasingly responsible in the way they manage sports organizations. In other words, stakeholders expect more and more from it and the services provided to them have to be of good quality. Sports organizations depend on their stakeholders; therefore, it is necessary to understand their present and future demands and meet their requirements. Doing so will make better use of the organization's resources and, in return, will improve stakeholder loyalty, despite growing competition. This section deals with the main issues related to quality management in a sports organization. It begins by dealing with the role of stakeholder expectations and quality perception in order to obtain their satisfaction. The ways to identify and classify stakeholder expectations are discussed below.*

**Keywords:** sports organizations, stakeholder, expectations, quality management.

**JEL classification:** M12.

## 1. Introduction

When trying to manage the quality of a sports organization supply, it is necessary to take into account the two dimensions presented below. *Expected quality* refers to what stakeholders expect of the organization, in the form of attributes and standards. This is especially important for stakeholders who obtain the services of the organization for the first time, since the decision to approach that organization is not based on experience, but on the expectations created. The *perceived quality* is the level of quality that the stakeholders believe they have received after the provision of the service. (Marcu, Buhas, 2014: 680) After using the service, stakeholders compare the expected and perceived quality, to evaluate the quality of the offer based on the difference between the two quality grades. In order to offer a quality offer, it is necessary to design a service that is as close as possible to stakeholders' expectations and then evaluate whether there is a difference between the expected and perceived quality. If a deviation is detected, the necessary corrective measures must be established to reduce it. The role of quality management is precisely to reduce the difference between expected and perceived quality, respectively to apply a series of practices that allow the organization to provide its services to the full satisfaction of its stakeholders. These practices should cover all aspects of the organization, from staff training and stakeholder consultation to operating procedures. (Masterman, 2014: 72).

## **2. Stakeholder satisfaction**

Satisfaction in services arises from the experience acquired by sports organizations with their offers. This experience is the sum of stakeholder interactions with your services, products, people and processes. It starts from the moment a stakeholder becomes familiar with the brand and continues beyond the moment the service is provided. (Berrone, Surroca, Tribó, 2007: 38-40). Satisfaction is arguably one of the main issues in marketing, since if stakeholders are not satisfied, they will turn to the competition. The problem is that satisfaction is an emotional response and is determined more by the stakeholder's own perception of the adequacy of the service to anticipated expectations than by the actual operation of the organization. For example, a sports organization can set a long registration period for a competition. If, on the other hand, there are athletes who do not meet these deadlines, they will probably be disappointed by the sports organization, since their perception is that the organization of the event has not met their expectations. (Dervitsiotis, 2003: 518) On the contrary, if they arrive on time, the fact that there is a limitation of dates will have little influence on their degree of satisfaction with the organization. It is difficult to guarantee stakeholder satisfaction, because the feeling of dissatisfaction has different origins, some of which cannot be controlled. The feeling of satisfaction depends on health and fatigue, the influence of other people during the experience, a traffic jam or simply having a bad day. For this reason, it is especially difficult to manage the satisfaction of a sports organization offer. Therefore, it is advisable to investigate satisfaction together with the stakeholders. If only one dimension of a sports organization's marketing efficiency could be assessed, this would be satisfaction because it arises from an evaluation of performance in relation to stakeholder expectations. Hence, the information obtained in terms of satisfaction will help to improve the performance of the service.

## **3. Stakeholder expectations**

To manage customer satisfaction, one has to know what makes up that satisfaction. Satisfaction is the difference between what is expected and what is perceived of the service received. Stakeholders expect sports organizations to provide a number of services of a certain level. For example, a person who wants to face a physical and psychological challenge, while having fun, always respecting the environment, will demand a service that creates these benefits, respectively a competitive sport in a natural space, without risk. There are several sports that meet these expectations. However, expectations are often even more precise. For example, this person may really want to rock climb in a club near his home, that has introductory climbing courses and that has qualified staff. People's expectations can vary in number and importance. The challenge is to identify which are the most important expectations. (Fischer, Brettel, Mauer, 2020: 100) Fortunately, it is quite easy to gather information on stakeholder expectations through interviews that include questions such as: What do you expect from the sports organization? What expectations do you have in relation to the service provided by a leading organization? Although some of the expectations are usually quite specific, they can generally be classified into five main types of services, as shown in Figure 1.



**Figure 1:** Dimensions of the services.

Source: Fischer, Brettel, René Mauer, 2020: 88.

- **Intangible characteristics:** services have a series of intangible aspects, which cannot be seen, felt or touched. Stakeholders have expectations around these intangibles and therefore it is necessary to determine what they are. For example, stakeholders may expect sports organization to be an expert in a sport, in which case that image of an expert will have to be created in order to meet those expectations. (Fischer, Brettel, René Mauer, 2020: 89)
- **People:** services are actions performed by people, and stakeholders will have expectations about the attitude, skills and physical appearance of the people who are involved with a sports organization. (Fischer, Brettel, René Mauer, 2020: 89)
- **Physical evidence:** sports organizations must create a tangible environment in order to provide the service. The physical evidence includes the facilities, the equipment and all those tangible elements that facilitate the communication of the service, such as brochures, letterheads and signs. Since these aspects can be seen, stakeholders can have clear expectations regarding the physical evidence of the organization. (Fischer, Brettel, René Mauer, 2020: 89)
- **Associated products:** along the same lines as expectations about physical evidence, stakeholders also have expectations about goods associated with the service, such as T-shirts, bags or traded goods. (Fischer, Brettel, René Mauer, 2020: 89)
- **Functional processes:** the quality of the service provided to stakeholders depends mainly on the organization and execution of the various tasks. Stakeholders have expectations about the way the service will be provided and you have to know what they are to know if it is correct. (Fischer, Brettel, René Mauer, 2020: 89)

#### **4. Perceived quality**

Once we know the expectations of the stakeholders, their perception regarding the level of quality provided by the sports organizations that must be ascertained. Stakeholders have to experience a service in order to assess its quality. As they make use of the service, they evaluate the quality through a series of parameters, such as: Expectancy, Intangible characteristics, People, Physical evidence, Associated products, Functional process. (Marakanon, Panjakajornsak, 2017: 28) Stakeholders apply these criteria and others to determine whether the services

provided offer the expected quality. If there are discrepancies between the quality expectation created by the sport organizations offers and the perceived quality, find out the cause and establish the measures that can be implemented to improve.

## 5. Conclusion

Sports organizations as open systems are exposed to changes in the environment (more dynamic and complex), causing decision-making. The process itself is more difficult, risky and uncertain due to the number of objective and subjective variables than managers should take into account. To perform this process in a reliable way, they make use of their intuition, their prior knowledge and their imagination, in addition to having the support of mathematical techniques that provide them with the necessary information, although many times that information is erratic or incomplete due to the scarcity flexibility of the models used, having only the ability to process numerical information, ignoring other factors related to the environment and its moment in time. Stakeholders will have expectations regarding each of the services provided to them and, therefore, expectations must be evaluated for each case.

On the other hand, it has been observed that the literature related to the theory of interest groups in sports organizations is scattered and perhaps more developed in some areas than in others, a situation that generates a lot of information and information in some areas. Also, in others the information is scarce. All this makes it necessary to define a general framework of interest groups that would provide greater knowledge to the field of sport and the understanding of the dynamics of the interest groups of sports organizations.

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# FROM THE ANTECEDENTS OF STRATEGIC THINKING TO THE DIGITAL TRANSFORMATION PROCESS. FROM INNOVATION TO PERFORMANCE

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**Abstract:** *Due to the fact that lately there is more and more talk about the digital transformation of businessmen and companies, I decided to carry out a research that would highlight the background of strategic thinking and the company's innovation process. The present research is based on studies of specialized literature. It is the theoretical and fundamental basis of future research in which I will conduct an empirical research based on a questionnaire. More and more often we encounter cases in which strategic researchers and company directors have to assume a stable competitiveness around existing companies. In order to avoid the decline of a company and to support the increase of its performance, it is necessary to cultivate a practical management thinking and to cultivate a rigorous strategic thinking. Well, if we consider all these things so important, why is the adaptability of the organization to the process of digital transformation not considered as important? Therefore, it is very important to understand the relationship between the antecedents of strategic thinking and strategic thinking at the organizational level to implement as correctly as possible new digital marketing strategies within the organization to maintain market competitiveness and of course to increase the company's performance.*

**Keywords:** strategic thinking, innovation, performance, marketing skills, technology, digital transformation.

**JEL classification:** M10, M19.

## 1. Introduction

I chose these research topics because the process of digital transformation is more and more common in most companies. Most of the studies I have read from various researchers in the field show that without the ability to adapt to the process of digital transformation, companies risk disappearing from the market. An emerging strategic approach is very important in the development of sustainable strategic competence and in gaining competitive advantage (Cizmaș, Feder, Maticiuc, Vlad-Anghel, 2020). Adaptability to the new is one of the main key factors that an organization must take into consideration. The new strategic thinking that organizations should implement must be focused on digitization, because digitalization is ubiquitous both in real life and in any organization that is thriving. The ability to think strategically is an increasingly important requirement for managers at different levels within organizations. Cultivating management practices and rigorous strategic thinking is the most important step a leader and company can take to avoid decline and sustain growth (Moon, 2013). Various

studies and specialized research on strategic thinking in various fields of activity (including strategic marketing, human resources management) are increasingly focused on concept thinking and the need for strategic thinking, but which involves the process of strategic thinking (Moon, 2013)

It is very important to understand the proposed concept for comprehension of the relationship between the antecedents of strategic thinking and strategic thinking at the organizational level (Moon, 2013). Another very important thing is to understand the relationship between the company's marketing performance and strategic thinking at the organizational level. Most of the time, managers who succeed to adopt a strategic thinking also need a strategic thinking framework. This strategic thinking framework will help managers guide how they examine relevant pitfalls, core activities and interests, and determine strategic implications for new relevant markets (Allio, 2006)

Markets are constantly changing, as is technology and innovation. Therefore, in order to formulate a correct innovative strategy, it is necessary for this strategic thinking to be able to adapt to new markets, to review itself in terms of thought processes in terms of market analysis and to choose the best positioning on the market. The main purpose of strategic thinking is to capture and analyse the relevant forces to create new opportunities. In order to generate new business models or enter on the newest markets, it is necessary to adopt a strategic initiative that can change the market and position.

In the first part of the article, you will find the concept of strategic thinking and its key elements, and in the second part of the article, we will discuss strategic orientation and innovation.

## **2. Literature Review**

### **2.1. Strategic thinking, stages and consequences.**

**Strategic thinking** is a thought process, first developed centuries ago by military organizations, organizations that have found it useful to develop aids for strategic thinking that help them focus on the right issues and provide a common picture, a framework reference for discussing and reviewing the strategy (South, 1981). One of the main methods of solving strategic problems is strategic thinking. Strategic thinking often combines the rational and the convergent approach with a divergent and creative process.

#### **Key elements of strategic thinking:**

**Systematic thinking** - is the concept of thinking that describes systematic strategic thinking. What exactly does this mean? To a holistic system that can integrate each part into a whole. In order to understand even more exactly what systematic thinking refers to, we think about the fact that it always forms individual, structured, intertwined actions so that things can happen, can take shape and reach a result, as simple and in a way as correct as possible. From the point of view of the organizers, it represents an integrated perspective, but most of it needs a detailed research to understand the internal and external dynamics of the company.

**Creative thinking** - we see it as a strategy for developing new solutions. A strategy that creates a competitive advantage. With this strategy you can look for new approaches, new ways to make things better, in a simple word - creative. With

the help of creative thinking we can always look at difficult situations or problems from a whole new perspective. A perspective that can generate new solutions out of the ordinary, but that lead you to our result and satisfactory. I believe that most companies that aim for digitalization (digital transformation) must have implemented the creative thinking process in more than 70% of departments. Once the organization is accustomed to the idea of creativity and getting results in a short time by making quick decisions, that company will certainly give results in terms of digitizers. I really believe that there is a relationship between creative thinking, innovation and the process of digital transformation of an organization.

**Vision-based thinking** - this thinking is more dedicated to top managers in an organization. It is said that a capable manager must have the necessary capacity to give a complex and multilateral meaning to both the projects he manages directly and those he sub-coordinates.

When we face more complex situations, we need a kind of orientation, some values and priorities in order to develop viable strategies. Compared to creative and systematic thinking, vision-based thinking helps you see things as a whole, have a little bit of the 3 types of thinking, but being able to apply them as effectively as possible to get results. The leaders of the largest companies have managed to focus on building organizations based on understanding the purpose and the underlying values, the fundamental and sustainable principles that guide and inspire people throughout the organization. But all this in order to create healthy communities to create their identity.

**Market-oriented thinking** - this type of thinking is the focus to show our interest oriented towards the market. It is the most often used concept in improving the marketing performance of organizations, but also a concept used in increasing sales and achieving a sustainable level of the company.

## **2.2. Orientation towards strategic innovation and performance (Digital Transformation).**

As I said earlier, digital transformation is one of the most discussed topics in business lately. Regarding this study, I divided this topic of discussion into two parts: the orientation towards innovation and the technological orientation. If you were wondering why it is because innovation is one of the main factors that contributes to the competitiveness of companies and can lead to the performance of companies and technological orientation, the technological process helps to make things more efficient within a company (Moon, 2006).

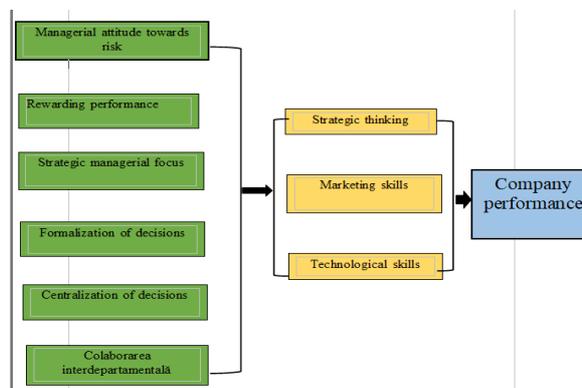
**A company's strategic direction of innovation.** The process of strategic innovation of a company, or rather the strategic direction of innovation of a company is the result of discoveries and emerging needs of customers through various new technological solutions to create a strong and essential link between innovation and performance. Previous studies show that there is little research that focuses on the link between the strategic orientation of a thread and the explanation of the heterogeneity of innovation strategies within companies. Moreover, the influence of top management is of great importance, because the most important decisions and innovative strategies have been taken at the management level. Once the top management of the company focuses on the emerging needs of customers and the adoption of new technologies, they can lead to the development of new products with new technological features on the market and which can later result in an increase in company performance.

**Technological orientation** - shows the level of importance that a company dedicates to involvement in research, development and technology, to verify the technological potential and technological trends. This type of approach, orientation is manifested within a company when that company has acquired a substantial technological expertise and is investing in technological developments at the moment. About this type of orientation, I have not seen much research in the literature, but it is considered to be one of the most important types of strategies. Companies must always be prepared to predict and anticipate future demands, for this they need a proactive orientation of technology and the application of the most innovative technologies in new products. It is said that a strong innovation has a significant influence on the company. The new product enters a new market and can offer performance potential because it is new to the market. This type of product meets the needs of today's customers and therefore can increase customer value.

Innovations are considered to be the most radical initiatives and sometimes even the most disruptive initiatives that the organization can take when you really want a change in it. In general, a company uses creative thinking, innovative ideas when it needs incremental improvements to products and processes. Radical innovations have the greatest impact on the market. One of the best positive examples we can consider is Google. For Romania, Google is the most impressive example of innovation. Besides, I would be hypocritical not to admit that it is recognized as one of the most innovative companies in the world.

### 3. Conclusions

Therefore, through this article I managed to lay the theoretical foundations of a research study that connects the antecedents of strategic thinking and the process of digital transformation of companies. Process that can ensure the competitiveness of a company's market, the implementation of new products on the market and of course the performance of the company. Following the theoretical research conducted, I managed to create a conceptual model of research, which I will present in Figure 1 below. As I said earlier, the next research I will do it will be based on the literature of this article and the theoretical conclusions. The researcher's hypotheses will be the following:



**Figure1:** The hypotheses of future research

I specify at some point in this article that it is very important for managers and organizations to understand the connection between strategic thinking, innovation and digital transformation, rather, an accurate understanding of the concept of strategic thinking and the key elements of strategic thinking, such as: systematic thinking, creative thinking and vision-based thinking. I understood and concluded that in order to be competitive in the market and to be able to perform, a company must be able to implement the 3 key elements of strategic thinking. Basically, you can't bring innovative products or services to the market if you don't have the necessary ability to think systematically, creatively or you don't have an overview of what you want to achieve.

In subsequent studies, I will analyze this approach and conduct research based on the questionnaire. I will interview between 70 and 100 answers and I will build a database. The answers in this database will be analyzed and interpreted using the SPSS Statistics program. Following such research, we will be able to draw much more concrete and pertinent conclusions on business in Romania. I will effectively analyze this approach to see if I can offer recommendations to managers within the analyzed companies.

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## ASPECTS REGARDING THE DYNAMICS OF HORECA SECTOR IN NEAMŢ COUNTY IN THE LAST TWO DECADES

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**Abstract:** *The HORECA sector has been for the past 20 years one of the most dynamic sector of Romanian economy. The changes made in consumer's preferences and in the hospitality industry in general led to an increase of the companies focused on accommodation and food and beverage services. The aim of this paper is to make a brief analysis of the theoretical concept of hospitality industry and HORECA sector and of its dynamics in NeamŢ County in the last two decades. Based on recent statistics the research highlights the evolution of some economic indicators related to HORECA industry such us the number of active companies or the number of the employees in order tobriing to attention the importance of this sector in the local economy of the NeamŢ County and the challenges it faces nowadays.*

**Keywords:** hospitality industry; HORECA sector; NeamŢ County; active companies

**JEL classification:** Z30, Z32

### 1. Introduction

According to World Trade Organization tourism and travel related services includes services provided by hotels and restaurants (including catering), travel agencies and tour operator services, tourist guide services and other related services. Tourism is one of the largest and fastest growing sectors in most of the worldwide economies (OECD, 2020) and the hospitality industry is often linked to it. The hospitality industry is a combination of accommodation and food and beverage services designed for people located outside the area of residence (Stănciulescu, 2009) but nowadays the term features also services like event planning, theme parks, and transportation. The HORECA (*Hotels, Restaurants & Cafes*) industry is often confused with the hospitality industry but its dynamics exceed it and have deep impact in the commerce and services sector of any local economy as it addresses also to the residents.

### 2. Concepts and Theoretical considerations

The origin of hospitality concept has ancient roots, dating back to the time of Roman Empire as, in Latin, the verb "hospitality" means hosting guests (Moisescu, 2017). The hospitality industry includes all activities providing accommodation and/or food services, regardless of whether they are commercial or non-commercial, primary or secondary, tourist or non-tourist (Moisescu, 2017). Some authors consider that the hospitality industry should include only the

accommodation and food and beverage services but nowadays the concept has extended a lot. In a more flexible approach the hospitality industry also covers catering and meetings & conferences sector (Snak, 2011).

Still these two sectors (so called HORECA in Romania) are considered basic tourism services. Although food & beverage services sector is not designed exclusively for non residents consumers, its dynamics is more and more influenced by the dynamics of tourism (Snak, 2011). The HORECA sector has both a tourist and non-tourist part but its dynamics influences other economic sectors such as commerce, agriculture and industry which are responsible for providing the necessary supplies for it. Thereby, the dynamics of the HORECA industry is closely connected to tourism but its impact in economy exceeds tourism.

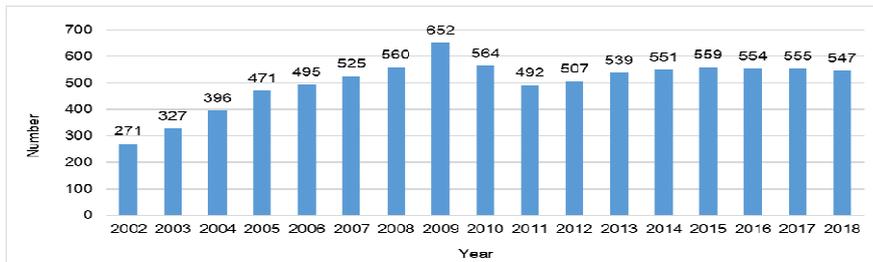
Of course, a strong tourism sector based on the proper capitalization of the natural and anthropic resources of a certain territory generates also a strong HORECA sector because an increase in the number of tourists spending the night in hotels leads to an increase of the amount of money they spend (Rusu, 2017).

So, the HORECA sector depends of a large number of variables from the economy in general to the development of the infrastructure and even of the number of parking spaces (Stănciulescu, 2009).

### **3. Assessments and Findings**

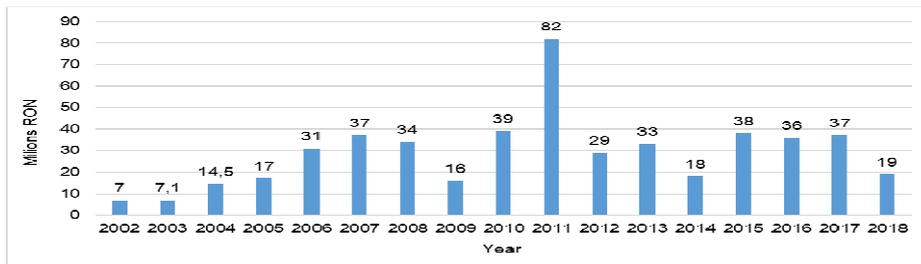
In the last two decades Romania's hospitality industry has undergone various transformations as a consequence of the investment efforts allocated to the capitalization of the country's many tourist resources (Snak, 2011). The increase in the number of both domestic and international arrivals as well as their demands has led to the expansion and development of the so called HORECA sector (Hotels, Restaurants and Cafes), whose purpose is satisfying the needs of both visitors and residents. Regarding the direct gross value added generated by tourism, it is found that the largest shares belong to food and beverages/catering services, followed by accommodation services (Statistical Yearbook of Romania, National Institute of Statistics, 2019).

Of the total active companies in Romania, the HORECA sector represents almost 4.5%, but in the last two decades there is a growing trend in the number of these accommodation and/or food providing services. Regarding Neamț County in the last twenty years the number of active companies in HORECA sector has increased until the economic crisis of 2008-2010 which led to a small decline followed by a stagnation. Out of the total number of registered companies in Neamț County, the HORECA sector represents 30%, which indicates its importance in the local economy and also the possibility of growth. Many of these companies are in fact small family businesses with very few employees, over 80% among them have between 0-9 employees, about 10% between 10 and 49 employees and only 1% have more than 50 employees. For example in the last 3 years only 5 active companies from HORECA sector in Neamț County gather more than 50 employees from a total of 547 active companies (National Institute of Statistics, 2020).



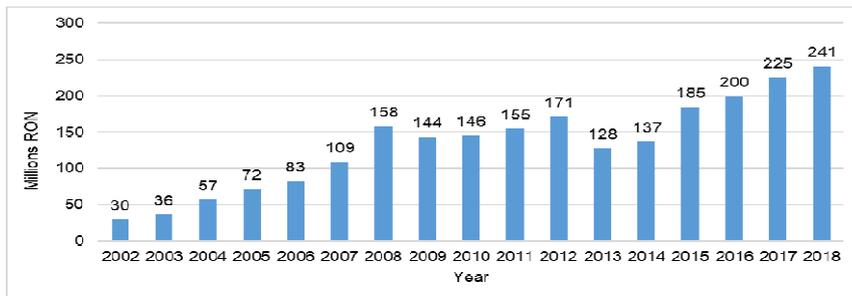
**Figure 1:** Evolution of the active companies in HORECA sector of Neamț County  
Source: National Institute of Statistics (2020)

The decline from 2008-2010 and the changes made by the government in the fiscal policies (the 25% reduction in the wages sector and the increase of VAT rate to 24%) explain also the decrease of the gross investments in HORECA sector of Neamț County after the year of 2011.



**Figure 2:** Evolution of gross investments in HORECA sector of Neamț County  
Source: National Institute of Statistics (2020)

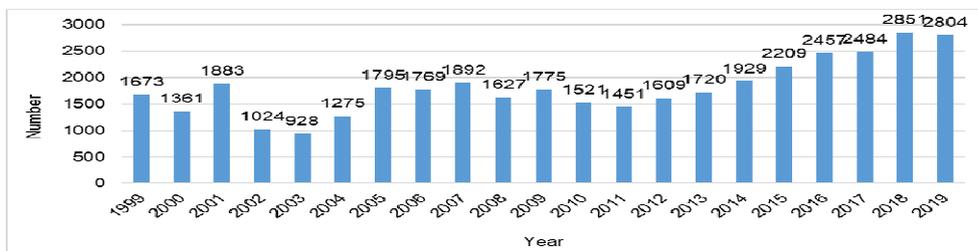
On the other hand, the annual turnover of the HORECA sector in Neamț County recorded a decline between 2013-2014, after which it started to show a small growth trend. Unfortunately for Neamț County the annual turnover of the HORECA sector represents only 1% of the whole annual turnover of all active companies which can be considered a small percentage in relation to the development possibilities of the local economy, especially of the commerce and tourism sectors.



**Figure 3:** Annual turnover of the HORECA sector companies of Neamț County  
Source: National Institute of Statistics (2020)

Another extremely important aspect regarding the economic analysis of HORECA sector is its impact on the labor market. The companies from HORECA sector are responsible for creating jobs in a much higher proportion than many other sectors of economy because they rely more on actually human resources and less on technological and production means. Regarding the labor force, the average number of employees in the HORECA sector has known a constant growth in the last two decades both at a country level and also in Neamț County. The existence of unregistered hotels and restaurants suggests that official statistics significantly underestimate the actual number of people working in this sector (Bran, 1999).

If in 2001, in Romania, only 1.4% of employees worked in the HORECA sector in 2019 the percentage reached 3.62%, meaning that nowadays 187,057 out of 5,164,471 employees work in hotels and restaurants. Regarding Neamț County in 1999 only 1.6% (1673 out of a total of 101,432 employees) worked in HORECA sector compared to 3.2% in 2019 (2804 out of a total of 85,828) (National Institute of Statistics, 2020). The decrease of this number in the early 2000s was caused by the large migration of the labor force in the context of the local economic instability but, fortunately, starting with 2011 we can notice a constant increase of this indicator. The main challenges facing the labor market of HORECA sector of Neamț County are the massive emigration of young workers, the seasonality of its activities and the low level of wages comparing to other economic sectors that affect the motivation of employees and create difficulties in finding qualified labor force.



**Figure 4:** Average number of employees in HORECA sector of Neamț County  
Source: National Institute of Statistics (2020)

#### 4. Conclusion

Unfortunately, both hospitality industry and HORECA sector have a high level of economic vulnerability and are easily affected by major changes such as natural disasters, pandemics, economic crises, labor force migration so the governments and in particular the local authorities should support them with more means as they can generate the economic growth and sustainable development of any county region or local community. Thereby concrete measures and policies are necessary in order to encourage the orientation of young people towards a job in this sector, supporting the small businesses, developing the tourist and non tourist infrastructure, and last but not least attracting constant investments that can reduce and manage the risks this industry faces.

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## **BUSINESS, MANAGEMENT, ACCOUNTING AND THEIR ROLE FOR SOCIETY**

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**Abstract:** *It is incredibly important to understand that business shapes society, it plays a huge role in culture, and a strong culture is the base for a healthy society. Based on culture, leaders are born in companies and institutions are formed, with great impact on the development of societies. The way businesses are run describes how society is influenced; they influence one another for better or for worse. Besides many advantages brought to society, like generating revenues for states through taxes, bringing innovation and creation of new exciting products, stability and security for citizens, there is an extraordinary thing that a business can do, one that Milton Friedman didn't see when he declared that the only social responsibility of business is to increase its profits (Friedman, 1970). Business can be an example to the whole society to better the world. Businesses can bring attention to important issues of humanity and inspire the next generation, by starting to solve the problems related to race relations, inequality, environment, education. Accounting now has the capacity to control the business and bring value to society through real-time and high-quality business reporting.*

**Keywords:** Business; Management; Real-time accounting; High quality reporting

**JEL classification:** M41, M14.

### **1. Introduction**

Our personal experience and view are consistent with academic findings:

1. The state of management is our big problem, organizations are unable to appoint the right leaders, most of the employees being unsatisfied about their managers.
2. The collaboration between companies but also between people inside them is rather poor than good, and that leads to a weak control over the business, despite the recent technological developments.
3. Ultimately, an accounting system that needs to be modernised and unified in order to give comparable results and deny the managers and executives to have any influence on the measurement and reporting of financial information in order to manipulate results and misrepresent the true value of their companies.

#### **2. Management and society**

There is a strong trend for a society where companies could create profit for investors and value for society, a "pie growing mentality", as Alex Edmans believes (Edmans, 2020). Now we aim for a society where corporations should shift the capital paradigm from maximising shareholder value to a stakeholder perspective. For this, Rebecca Henderson, in her book, talks about many initiatives of great

companies to make the world a better place and identifies some ways to do it, like creating shared value between businesses and consumers, building purpose driven organisations, establishing financial metrics for a proper measurement, cooperation (Henderson, 2020).

At the Business Roundtable, the association that represents the chief executive officers of America's leading companies, since 1978, the Principles of Corporate Governance endorsed principles of shareholder primacy, meaning that corporations exist principally to serve shareholders. But until 19th of August 2019, a new statement superseded the previous statements and outlined the new standard for corporate responsibility, a statement that redefined the purpose of a corporation: "truly commitment for meeting the needs of all stakeholders" (Business Roundtable, 2019).

Now we must find the proper tools to realise our goal. However, we should be aware of the fact that there are huge differences between statements and reality. The reality, unfortunately, is that the income inequality has increased sharply in the last 50 years, with a dramatic rise for the top 1% of earners (Piketty, 2015). In America, the gap between the wealthiest and poorest Americans is the highest it has been in 50 years (Krugman, 2020). According to Stiglitz, inequality do most harm to equitable and sustainable economic growth and undermine social and political stability. Stiglitz points out that a CEO enjoys incomes that are on average 295 times that of the typical worker, a much higher ratio than in the past, without any evidence of a proportionate increase in productivity (Stiglitz, 2015). Across the S&P 500, the average ratio of CEO pay to average worker pay was 335 times in 2015 (according to the AFL-CIO), compared to 40 times in 1980 (according to Economic Policy Institute) (Edmans, Gabaix and Jenter, 2017).

But it seems easy to make statements and hard to respect them, at least for our leaders. A new study, concluded that, since the inception of the COVID-19 pandemic, the adoption of the statement "has failed to deliver fundamental shift in corporate purpose in a moment of grave crisis when enlightened purpose should be paramount". The authors 'conclusion of the study is that "under stress, leaders still turn to the same old priorities associated with short-term shareholder value" (Heskett, 2020).

What should we do to narrow this difference between statements and reality? Can we trust company's management that is dependent on the financial results of their companies, when even at the academic level, which has the highest ethical standards, the scientists, in stress conditions, they could be biased? An empirical support from US data" concludes: "Like all human beings, scientists are confirmation-biased (i.e. tend to select information that supports their hypotheses about the world), and they are far from indifferent to the outcome of their research" (Fanelli, 2010).

The answer is simply blunt: we should trust data. Data, lots of data also used Steven Pinker when he came to the conclusion that "Now is the best time to be alive", bringing data from domains like health, inequality, environment and the state of democracy (Pinker, 2018). Yes, every domain has been improved, but now there are much bigger risks for the world which, if are not correctly measured and reported so that we all be aware of them and take proper actions, it could be devastating. Let us just think about nuclear weapons, global warming, poverty due to the increase in inequality, all kinds of diseases, erosion of democracy and many others.

And which type of data do we use when judging a company? We use data found in Financial Statements, and now we are talking about data from Integrated Reporting (IR), which, according to The International Integrated Reporting Council, is a concise communication about how an organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term.

High-quality business reporting is believed to be at the heart of strong and sustainable organizations, financial markets and economies (Bhasin, 2017). That means transparent, free from errors, relevant and real time information. And especially important, data that can be checked for authenticity.

Irrespective of the industry, businesses are responsible for the way a society is driven, that is why we should be much more involved in the way businesses are governed if we want to make our world a better place.

## **2. Accounting and management**

Accounting has a significant role in correcting anomalies from society. Anthony Hopwood wrote in the editorial of the first number of the *Journal Accounting, Organisations and Society*, from 1976: "Accounting has played a vital role in the development of modern society" (Hopwood, 1976). And it could be even more helpful due to the technological progress.

Accounting has been considered an art starting with the "father of accounting", Luca Pacioli, in a study work from 1514. But Robert Sterling believes that if we consider it as an art, we leave ourselves open to receiving instructions and threads while if we define accounting as a science, we would be less vulnerable (Sterling, 1975).

Our opinion is that the accounting science could be considered an art as long as it can represent exact the reality in a company and it can transform it, and with it, the whole society, correcting deficient processes and showing true performance, economical and especially ethical performance.

Even recently, the chairman of the International Accounting Standard Boards, Hans Hoogervorst, has declared that accounting is highly dependent on the exercise of judgment and is therefore more an art than a science, and do not blame accounting for the financial crisis from 2008. He continues and says that for the accounting standards to do their job properly, we need management to own up to the facts and auditors, regulators and investors to be vigilant (Hoogervorst, 2018). He believes that management thinking and auditor's vigilance could contribute to a good reporting, while we strongly affirm that only an accounting that is free of management judgement and management subordination could lead to a reliable reporting. Too many times accounting has been conducted by management instead of accountants, and it has gone wrong for our society.

Rebecca Lester and S.P. Kothari, in their paper, explain that, in addition to many other reasons, two factors partially contributed to the 2008 crisis: certain management incentives and fair value accounting standards (Kothari and Lester, 2012).

Also, Stiglitz points out that information and incentives played important roles in the financial market scandals of the late 90s (Enron/Worldcom) and in the financial crisis of 2007/2008. Executive compensation schemes, combined with bank accounting regulations encouraged the provision of misleading information,

booking income “above the line” and retaining liabilities of the balance sheet. Executives that are paid with stock options have an incentive to increase the market value of shares, and this may be done more easily by increasing reported income than by increasing true profits (Stiglitz, 2009).

“Exact representation: information should represent exactly the event that they want to reflect. For an exact, perfect representation, the description should have three characteristics: completeness, neutrality and free from error” (Ristea and Dumitru, 2012). Faithful representation should be our ideal.

### 3. Conclusion

Due to benefits of automation, decisions could be made on insights developed on an evidence-based data. Management itself can view key performance indicators developed in real time and take proper decisions. We could benefit from more opportunities that are the primary benefits of real-time reporting associated with better collaboration, accessibility and flexibility.

Audit work would be much more efficient on preventing frauds and assuring the public of accuracy of financial information. It is obvious that any time lag creates an opportunity to falsify financial data. Technology that allows real-time recording and presentation of financial data generates helpful inputs for auditors’ opinions and other reports for stakeholders that enhance the accuracy of financial information in real time (Billings, Billings and Musazi, 2020).

Psychologists and economists believe that human beings adjust their behaviour based on the metrics they are held against (Ariely, 2020).

Therefore, if accounting continues to report information related to customer and employees satisfaction, how much carbon dioxide is emitted in the atmosphere, or other information about inequality, environment, level of education and health, then we have a big chance to succeed in attaining those metrics and the world will become a better place for everybody.

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# OPPORTUNITIES FOR A SMOOTH TRANSITION FROM A LINEAR TO A CIRCULAR ECONOMY OF TOURISM IN BULGARIA

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**Abstract:** *The linear form of management established so far in many sectors and in tourism in particular proves that it does not lead to the desired development but rather to an instant consumption (depletion) of natural resources. It is tourism that will increasingly have to declare that it will operate with the green mind assets in order to be sustainable both now and in the future. The aim of this study is to present opportunities for a smooth transition to a circular economy of tourism in Bulgaria. The methodological approach applied in this study is based on the structural solutions of the EU countries, which are the pioneers in introducing a circular economic model. Last but not least, the study uses: the technological forecasting method, desk study, empirical analysis and market research.*

**Keywords:** circular model; sustainable development, circular economy, economies of scale, product life cycle, sustainable product

**JEL classification:** L83

## **1. Introduction**

The current policy of promoting the introduction of the circular economic and tourism model is based on the action plan adopted by the European Commission, which is one of the components of the European Green Deal (EU Circular Economy Action Plan). The legislative, regulatory and voluntary approaches of this European Commission initiative are being developed as a continuation of the already existing set of Commission measures and approaches and regardless of the phase of existence of the products/services (the so-called life cycles). This measure to promote a circular economic model also involves making the current ecodesign framework for energy-related products more effective, including the drawing up and adoption of a new Ecodesign and Ecolabelling Working Plan 2020-2024 (Circular Economy Action Plan). The EU's sustainability policy adheres to its basic principle: to change, with actions, the making of green products a norm, and the rules imposed will also aim to reward manufacturers of products/services on the basis of meeting their sustainability criterion. The new policy framework for a sustainable product includes three building blocks: product design actions, consumer empowerment, and more sustainable production processes (Modern diplomacy, EU POLITICS, 2020).

## **2. EU policies on promoting the circular economy**

To shape a policy action plan, a proper approach is needed to develop the overall EU policy framework. In 2015, the European Commission proposed such

comprehensive approach in the form of a circular economy package, including legislative proposals aimed at promoting waste recycling and introducing a wide range of measures to close the chain of life cycles throughout the value chain. This includes production, consumption, repair, and recovery as well as management of waste and secondary raw materials that are re-introduced into the economy (Buren, N.; de Vries, M., 2017). The circular economy concept gained additional strength when the European Commission presented the circular economy package in 2015, but the implementation of the circular economy represents a challenge for each country, especially for countries such as Bulgaria, as such a transition requires adaptation to the specific situation of each country and region, combined with the ability to use its intrinsic qualities and strengths (Buren, N.; de Vries, M., 2017).

### **3. Methodological approach of the study**

Tourism professionals refer to the environmental monitoring method as being mandatory in the conduct of research in the field of tourism. It is because of these research claims that this method should be included in this study. The aim of the environmental monitoring method is to forecast future events that would precede the change of approach for the introduction of the circular economic model in tourism in Bulgaria. There is also a particular need for a combined approach in the conduct of research on the subject, since studies carried out so far have focused only on environmental or economic aspects in the design of sustainable development strategies, and this could be changed by using the method of eco-efficient value and following its detailed methodology.

The emerging trend of the industrial "free-of-charge" pollution being no longer acceptable can also be traced by the strict regulations imposed on the demand for the most efficient technologies, eco taxes, eco charges and emission policy in the developed countries around the world, proving in practice that a cleaner product can withstand stricter government regulations and, by their very nature, the low environmental costs of a service, such as tourism, highlight it as being competitively advantageous (Voglander, Joost G., Scheepens, Arno E., 2017).

### **4. Obstacles to the introduction of the circular economic model**

Although renewal is one of the key options for reducing the environmental burden for a sustainable future, the use of sustainability as a sales argument seems to professionals to be rather limited. In the accommodation sector, consideration may also be given to whether sharing platforms can lead to intensified travelling having a negative environmental impact (Rizos, V.; Tuokka, K.; Behrens, A., 2017). In most global companies, there are still obstacles to long-term sustainability because when company capital is affected, the focus is shifted from environmental protection to increased investments in the company (Nastu, P., 2008). In recent years, an increasingly targeted focus has been placed on a verified system for promoting 'Internet of things' projects, including sensors and drives related to networks and computing systems, which determine which technology exactly can create real economic value (McKinsey Global Institute 2015).

## **5. National policies promoting the circular economic model in the European countries**

It is of particular importance how circular economy is run at regional and local level, especially where there is a concentration of initiatives of groups of citizens or where companies are expanding their circular plans (Buren, N.; de Vries, M., 2017). This is the so-called economy of scale or development of the circular model at a scale level, with regional and local authorities being able to introduce a combination of measures to facilitate and promote the development of the circular economy (Buren, N.; de Vries, M., 2017). Research has also shown that at least two ministries from any given country are involved in the transition to a circular economy. These include, in most cases, the ministries of environment and sustainable development, finance, economy, agriculture and home affairs, and this inter-ministerial approach shows that most countries and regions have a clear understanding of this comprehensive and interdisciplinary character of this policy area (Buren, N.; de Vries, M., 2017).

## **6. Conclusion**

The future introduction of circular economy in tourism can be related to the ability of the tourism industry to renew itself and replace the outdated economic and practical principles with new ones which are energy-consuming for tourism in terms of sustainability, nature conservation and generation of future and permanent revenues. Of course, there is also the challenge of a change in the global thinking of an "easy life", but at the cost of a clean, clear and foreseeable future (Geipele, I.; Wirzhbitskis, Y.; Plotka, K.; Zvirgzdins, J., 2018). As is known, the transition to a circular economy in the EU is already in its initial stages, characterised by emerging alternative visions and increasing experiments. So far, in Bulgaria, the circular model in the economy has been seen as separate events whose sole aim is to generate profits, but individual and fragmented events do not bring profits to a long-term asset. Improper management steps can be modern, but for a short period of time. In terms of long-term profits, individual producers and consumers in tourism can and must follow the beaten tracks of countries such as the Netherlands, Denmark, Germany, etc. because their policies have a long-term nature and apply numerous working public and sectoral circular models. The beaten tracks would form a complete cycle, which could be called a vortex cycle that renews itself based on the activity throughout a product's life cycle. The vortex cycle is illustrated in the logo of Bulgaria, which is presented by the blooming rose as a symbol, but if we take a closer look, the rose petals themselves have stages of cyclicity. It is precisely because of the above-mentioned examples that Bulgaria has assumed responsibility for reviewing its overall policy on the introduction of a circular economic model in tourism, where cyclicity is more natural than in other countries. The forms of consumption, novelties and innovations in tourism must be updated in the whole tourism management policy of Bulgaria, as the most direct path to a sustainable economic development is the introduction of the circular economic model.

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## **BANK LIQUIDITY – GOING CONCERN VS. GONE CONCERN**

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### **Abstract:**

*For most actors of the financial system, the liquidity in general and the bank liquidity in particular represents a stressful subject to discuss and even more stressful to manage. During the significant crises, especially the “modern era” ones, the liquidity issue became “the knot in the handkerchief”, the key element in handling the problem banks.*

*Moreover, while liquidity management became an important area of banking activities during normal times (going concern), and the tools/models used for this purpose evolved consequently, under the new framework of banking resolution developed after the financial crisis of 2007-2009 in order to break the vicious circle between banks and sovereigns (the “Helsinki declaration”), the problem of ensuring liquidity for continuing the critical activities/functions, if any, of banks under resolution, and thus obviating the negative impact on financial stability, appeared not to have been addressed enough by the new framework. Thus, currently, the subject of liquidity in resolution and resolution funding prompted a significant amount of interest, the researchers being expected to provide thoughtful insight as a valuable support for policy makers and legislators.*

**Keywords:** liquidity; bank liquidity; bank resolution; contingency funding; resolution funding;

**JEL classification:** G01, G33, G38

### **1. Introduction**

The economic context after the financial crisis of 2007-2009, the handling of which involved considerable efforts from authorities responsible with the prudential supervision of financial institutions and banks, including by adopting decisions to use public funds of a significant volume, highlighted the enhancement of the requirements regarding the liquidity risk as one of the main priorities for regulators from around the world, mindful of the fact that, whatever the fundamental causes that triggered the crisis, the bank’s liquidity and the liquidity risk management proved to be the weak link in the system.

### **2. Bank Liquidity and Liquidity Risk Management – Literature Review**

The bank liquidity should be viewed in the context of understanding the key role of banks in the economy (i.e. to provide the financial resources needed to the other actors of the economy in order to ensure the economic growth as a whole). But the liquidity could also be seen as the bank’s capacity/ability to effectively meet the withdrawal of deposits or the payment of other types of overdue debt and to cover its additional financing needs to support its loan and investment portfolio (World Bank, 2003), without negatively affecting the day-to-day business (Matz and Neu, 2007). Thus, the bank’s liquidity refers to how rapidly and at which cost a bank

could monetise its assets, either financial (e.g. shares) or fixed assets (e.g. commercial buildings) (Chacko et.al, 2011). The markets, imperfect from the liquidity standpoint, show, according to the same authors, two features as regards liquidity: (i) the indirect cost, or awaiting cost, due to the time needed for the completion of a transaction of transforming an asset into cash during which the asset price could drop, and (ii) the direct cost, meaning the amount that a certain institution is willing to pay to a third party, from the asset price, in order for the transaction to be completed on spot terms (transaction cost/liquidation cost). The multiple definitions of liquidity merge, according to Malz (2011), into two properties, respectively: (i) transaction liquidity, as a characteristic of assets or markets, and (ii) funding liquidity, more linked to the creditworthiness of the bank. Regarding the liquidity of financial assets, according to Negrea et. al (2009), a bond is liquid if it can be bought or sold rapidly, with moderate transaction costs, at a reasonable price.

Regarding the liquidity risk and its management, more authors discussed this topic, both before and after the financial crisis of 2007-2009, addressing the subject from different perspectives, using quantitative, qualitative analyses, or a combination of them. Thus, Dowd (2005) proposes the estimation of liquidity risk (in the context of measuring market risk) by using a concept similar to VaR, named liquidity at risk, or cash flow at risk (the latter being used mostly in the case of non-financial entities). Liquidity at risk relates to the risk of cash flow forecasted for a defined time horizon.

At the down of the recent financial crisis, Hull (2007) analysed, among other risks specific for banks, the liquidity risk, highlighting the herd behaviour of market participants, their tendency to use the same type of transactions at the same time, leading to what is known as the liquidity black hole.

Based on the experience gained from the recent financial crisis, some authors try to address the phenomenon of massive deposits withdrawal, the so called "bank run" in stress times. Thus, the mere deposits (uninsured/side deposits) provide liquidity to banks but, on the other hand, due to the behavioural nature of depositors, banks are exposed to the risk of intensive withdrawal. According to Bohn and Elkebracht-Huizing (2014) this vulnerability appears due to the side deposits multiple equilibria with different confidence levels, the most accepted model regarding the dilemma of strategic decision making being the model Diamond and Dybvig, which provides a convenient framework for analysing traditional instruments used for stopping or avoiding withdrawals (e.g. convertibility suspension and deposit insurance). The authors also describe the impact of regulations over the bank's contingency funding, underlining the importance of liquidity stress-tests (performed by institutions, authorities and for the whole system), as well as the new regulatory requirements of liquidity introduced by Basel III (Liquidity Coverage Ratio and Net Stable Funding Ratio).

More recently, after the establishment of the bank recovery and resolution framework, based on the FSB – Key Attributes on Effective Resolution Regimes for Financial Institutions, involving coordinated activities from both competent authorities and financial institutions in order to ensure the recovery in stress situations and the adequate preparedness for an orderly resolution if the failing bank cannot be recovered, Venkat and Baird (2016) highlighted the importance of integrating the recovery plans considerations and resolution plans warnings into the liquidity risk management architecture specific for each bank.

### **3. Liquidity Risk Management in Banks – Going Concern Perspective**

National/regional financial systems are dominated to some extent by banks which are mostly part of cross-border banking groups, especially in emerging economies like Romania.

These banks are structurally exposed to liquidity risk as they own considerable illiquid assets, such as loans, and they are typically funded by liabilities with shorter tenors, such as customer deposits. Liquidity risk management, is critical for the viability of these banks, being a key area of focus for bank supervisors, beside the capital adequacy. From the banks perspective, liquidity risk management is about anticipating liquidity needs and preparing to meet them. Considering the key components of liquidity risk (liquid assets, core and non-core funding and off-balance sheet commitments and non-contractual outflows), a precondition to the efficient liquidity risk management is a reliable management information system (MIS), providing timely and accurate information on the bank's current and prospective liquidity positions, in order to support a comprehensive reporting framework available for decision makers. Important features for the management of liquidity risk are: (i) the risk tolerance, established by taking into consideration relevant factors as risk appetite, level and composition of bank capital and earnings, bank measures of its liquidity needs, bank's ability to convert standby liquidity into cash, and (ii) risk limits (e.g. non-core funding to total funding, loans to deposits or loans to core deposits) that are to be established by the board and followed by all key functions of the bank, including through independent reviews and internal controls.

Fulfilling the bank's liquidity needs involves liquidity planning, the process of estimating future funding needs and the way to meet them, as part of annual budgeting and planning. This implies that bank must define its desired maturity structure, targeted resources, instruments needed and amounts to source in each currency, by extensively using simulation techniques and stress testing in order to assess whether and how the bank's liquidity position deviates from the expected path. A key part of liquidity planning is the estimation of cash flows, deriving from assumptions, based on modelling liquidity exposures under a range of scenarios with different time horizons and degrees of severity. One tool used for planning future cash flow needs is the maturity ladder, ranging from simple devices to complex models. In order to be prepared for difficult times of liquidity crisis, the banks could use: (i) early warning indicators (like rapid asset growth, repeated incidents with positions approaching or breaching internal or regulatory limits, rising wholesale or retail funding costs) that help to identify emerging funding vulnerabilities, eventually triggering the implementation of the bank's contingent funding plan, (ii) liquidity reserves (liquid assets that allow banks to "buy time" in order to survive the strain by selling or pledging these assets to raise cash), (iii) liquidity stress tests that help banks evaluate the adverse impact of predetermined risk factors on banks' funding vulnerabilities, asset liquidity and sources of contingent liquidity, and (iv) contingent funding plans, as a "compilation of policies, procedures and action plans for responding to severe disruptions to a bank's ability to fund some or all of its activities in a timely manner and at a reasonable cost" (BCBS, 2008).

With a national regulation framework closely articulated with the European legislation, including in the field of liquidity requirements and internal assessment process for liquidity and capital, a remarkable characteristic of Romanian banks is

that all of them, both the local ones and the subsidiaries of cross border banking groups, register high levels of liquidity coverage ratio. Moreover, the supervisory authority annually oversees the internal processes established by each bank in order to assess the adequacy of capital and liquidity, as well as the risk profile of the banks, the outcome of this tight supervision consisting of no cases of failing or problem banks, even during the financial crisis.

#### **4. Bank Resolution Framework – Main Features**

One of the main pillars of the bank recovery and resolution directive (BRRD), establishing the European framework for dealing with banks in weak or failing condition, is the resolution framework that empowers authorities with tools and competences for handling failing banks without involving public money, but preserving the critical functions provided by the banks to economy and the financial stability of the financial system.

In this context, for a bank declared as failing or likely to fail, for which there are no private or supervisory solutions for recovery within a reasonable timeframe, there are only two ways of resolving, respectively through liquidation (the default option) or by applying resolution tools (bail-in, bridge bank, sale of business, asset separation) and competencies (write off and conversion of capital and liabilities) if it is in the public interest. The resolution tools seek to cover the losses and to recapitalise the bank (bail-in) or the acquirer/bridge bank (sale of business, bridge bank) through a fair burden sharing among the shareholders and uncovered creditors, thus avoiding the use of public funds to save the ailing bank.

In order to provide credibility to the new tools, resolution funds are established, funded by all banks through yearly contributions, that could be used by resolution authority to fulfil the potential capital shortfalls.

Still, the most important element aimed at ensuring the success of a resolution action is a new requirement that banks are asked to comply with, namely the minimum requirement of own funds and eligible liabilities, that could be used for recapitalisation in resolution (MREL). The eligible liabilities should meet specific criteria to be considered when the capacity to loss absorption and recapitalisation is assessed. One important issue related to the MREL requirements is the ability of banks to raise funds from the market through debt issuances at a cost and in a quantity that doesn't affect their viability.

Although visible progress has been made so far in preparing for possible resolution actions in terms of resolvability, including by ensuring the appropriate capacity to absorb losses and recapitalization (by imposing MREL), only the restoration of banks' viability by applying one or more instruments or resolution powers does not exclude the situations in which the respective banks encounter liquidity shortfalls.

#### **5. Conclusions - The Continuum from Going Concern to Gone Concern from Liquidity Perspective**

From the liquidity perspective, if we consider that, until the failing or likely to fail determination, a bank could use the central bank liquidity facilities or the emergency liquidity assistance, if applicable, the problem of ensuring the liquidity needs appear right after the resolution decision, when the application or resolution tools produces effects on the market and the market participants are reserved in providing funds to the bank resulting from resolution (see the figure below).

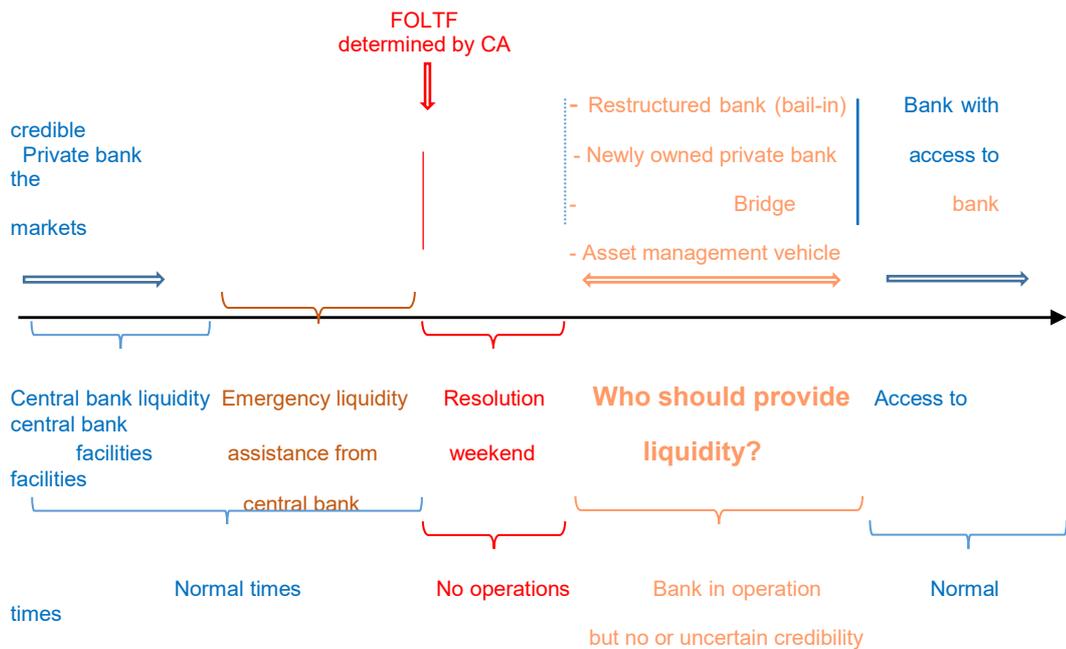


Figure 1: Liquidity provision in different stages – a sequence of liquidity sources  
 Source: adapted by author after Bruegel

In this context, the concerns of all interested parties (authorities, regulators, banks) related to this subject could be categorised on two layers:

- Based on the current legal framework, to identify the necessary steps to ensure the financing continuity, including liquidity, from going concern to right before, during and after resolution;
- Considering the existent facilities to grant liquidity support in different situations and scenarios to entities in distress, to identify the necessity for legal/regulatory adjustments in order to address the liquidity adequately, without creating moral hazard.

It should be noted that all concerns for addressing liquidity in resolution emphasize the need to distinguish between public aid for liquidity in resolution (e.g. the common backstop, the provision of guarantees by the Resolution Fund) and public sector losses (bail-out).

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## **IMPLICATIONS OF HUMAN RESOURCE DEVELOPMENT IN THE ACTIVITY OF THE ORGANIZATION**

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**Abstract:** *Human resources are the strategic resources of the organization, which is why investing in human resources is necessary and beneficial for the organization through the substantial contribution to a successful activity. Resource development is a necessity of all the organizations that want to perform and avoid the lack of a qualitative workforce in the context of high mobility of human resources and the need for adequate and motivating remuneration. Human resource development involves activities such as: training and development, organizational development and career development. The need to develop human resources within the organization is determined by the evolution of technology, the need to maintain a high level of quality for the entire activity, the need to adapt to changes in the external environment, increased consumer demands and last but not least the need to carry out the activity in terms of efficiency.*

**Keywords:** human resources, training, personal development, career development, planning, career management

**JEL classification:** M12, M53

### **1. Introduction**

Human resource management tries, through its development, to establish new relationships between employee and organization and at the same time puts a special emphasis on staff training. Considerable amounts of money will be allocated for human resource development with an emphasis on performance management. Human resources management is implemented by organizations at the highest strategic level consolidating the entire management activity of the organization.

Human resources management, as the activity integrated in the general management of the organization puts in the center of its actions the human resources, in close connection with the achievement of the organization's objectives, as well as the pre-established individual objectives. The issue of human resources involves multiple activities related to the human resource of the organization, operational activities on staffing the organization, in terms of efficiency in terms of professional training and achievement, of personal and organizational objectives, planning activities, job analysis, recruitment, selection, motivation, evaluation of individual results, promotion, training and improvement, etc.

## **2. The development of the organization in close connection with the development of human resources**

The literature emphasizes the key role of human resources, approached in close connection with the other resources of the organization. Human resources are interconnected with the other resources of the organization, so only a balance between the resources of the organization can contribute to achieving the goals set in the short, medium or long term. An imbalance between human resources, well prepared and other resources of the organization the premises of an efficient activity.

Regardless of the field of activity, there is a human resources development plan capable of providing a workforce that can efficiently cope with changes in the economic environment. The labor legislation, the Labor Code specifies in article 191, that the employer must draw up the annual training plan of his own employees following the consultation with the trade unions. Thus, the right of the employee conferred by the labor legislation to have access to training courses appears, the organization thus having the obligation to facilitate his access according to his concrete needs.

The development of human resources as a business activity focuses on building an independent function in the organizational structure of the enterprise (DRU), regardless of its nature or the number of employees because the need to invest in training and development of human resources is essential for the enterprise. The investment in training and improvement of human resources is based on economic and performance criteria, being considered a vital investment for the evolution and success of the organization.

Career management involves a sequence of activities, which focus on the human resources of the organization and the possibility of developing a career for each of them: correlation of individual objectives with the overall objectives of the organization; developing the careers of their employees in correlation with their performance and the training needs of the organization; designing an individual career plan for employees and highlighting promotion opportunities for employees with good results; professional orientation of employees according to their skills and their contribution to achieving objectives; stimulating low-performing employees by providing a personal development plan within the organization; advising employees in choosing training programs adapted to individual skills; development of training programs for qualifications necessary for the evolution of the organization; the development of multiple career opportunities for its own employees to cope with the permanent changes within the organization in the context of a business environment that is constantly changing, evolving.

Thus, organizations in which people continuously improve their performance, create a climate open to cooperation and which facilitate access to training and development, are called "learning organizations", they have the ability to spread and integrate information, learning from previous experiences and applying these experiences in addressing new challenges.

The organization must stimulate the overall development of the individual, the general use of the knowledge acquired in carrying out the activities, the application of a personal / professional development plan for its own employees in relation to the current and future needs of the organization;

The learning organization focuses on employee career development by stimulating lifelong learning, developing relationship skills, communication within the work group;

Organizations need to stimulate hands-on learning by creating complex learning situations, experimental learning and facilitating access to information for all employees, and stimulate dialogue and interdisciplinary learning so that all staff are captured in the learning process;

An important role is determined by the investment in human resources training considered as a beneficial one for the organization with implications in the success of the organization, the quality of human resources thus influencing the quality of the carried out processes ;

Within human resource-oriented organizations, the overall improvement of results is stimulated by stimulating learning, the practical application of acquired knowledge and the dissemination of accumulated information; thus the emphasis is on an efficient management starting from the idea that the change, the modernization must be done from the inside through an efficient administration.

With the appearance of human resource management, the efforts of specialists were directed to highlight the activities that lead to increasing the overall performance of the organization, thus developing two main models of human resource management: "harmonization model" and " Harvard general model" ( Burduş, 2005:818)

The harmonization model emphasizes the need to establish a close correlation between the overall strategy of the organization and the strategy in the field of human resources management. The link between these elements is summarized as follows, staff selection processes, human resources development by encouraging participation in training and development, rewards given following a well-founded system, based on increasing motivation through financial and non-financial rewards, this helping to increase performance.

The general Harvard model highlights the contribution of general management in the implementation of personnel policy within the organization, depending on the "interests" of the participants in the decision-making process and the overall policy of the organization.

The organization of human resources activities effectively is related to the attributes of the organization, the way of managing the overall activities as well as human resources activities in particular, being different from one organization to another depending on the size of the organization, field of activity, delimiting a series of activities: planning human resources, the analysis and design of positions within the organization, the staff training planning strategy, employee performance evaluation (Deaconu et al., 2012).

Planning human resources ,involves ensuring the need for human resources at the level of the organization by the existence of a correlation between the development policy of the organization and ensuring the necessary staff in terms of actual number of employees and their qualifications in accordance with the complexity of activities.

The analysis and design of positions within the organization is performed by specialists in the field of human resources taking into account the need for the job description for each position within the organization specifying the tasks and responsibilities involved in each job in accordance with occupational standards in our country.

The staff training planning strategy must take into account a controlled strategic design process so as to pursue the proposed goals and objectives.

Employee performance evaluation is a complex process that underlies the reward and career planning of employees, which is why it must be a coherent, transparent system, based on quantifiable indicators, well determined for each job, in direct agreement with tasks, issues and the responsibilities in the job description.

### **3. Conclusions**

Human resources management is developing as a new entity of general management but at the same time has as a starting point all the processes, concepts and models in general management.

With the appearance of human resource management we must keep in mind that there is a new managerial discipline through which the needs of human resources of organizations will be studied more carefully.

One of the elements that human resources management must study is that of predicting human resource needs. Human resources managers will need to be able to predict the level of employment and at the same time the workforce needs that the organization needs. It is compulsory to analyze and anticipate that the needs of the organization must be done for as long as possible, and at the same time must take into account the influences of the environment in which the company operates on human resources.

Human resource development involves activities such as: training and development, organizational development, career development. Staff training must have a continuous value through continuous training and their adaptation to the changes appeared in the field of activity.

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## FINANCIAL AUTONOMY OF LOCAL GOVERNMENTS

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**Abstract:** *In the last years, Romania has a tendency towards regionalization because part of the state powers are been transfered to local authorities, being said that local development policies have a higher efficiency at the regional level. In this article, I want to analyze the degree of financial autonomy registered in the counties of Romania because the higher the local financial authonomy is, the the capacity of public authorities to serve the needs of local communities increases and so does the local development. As the financial autonomy of local governments is a key variable in the local government process, this study presents the existing situation at the level of local public administration in all counties of Romania.*

**Keywords:** local public administration, financial autonomy, local governments;

**JEL classification:** H70; H79

### 1. Introduction

Local public power can be organized as local autonomy or as local state administration or as a combination of both. Many central governments currently promote public power decentralization policies to in which local authorities are given a high degree of autonomy in solving a wide range of problems. Decentralization is not intended to weaken the role of the central government, but to strengthen local public administrations, thus making them more receptive to local needs.

Decentralization involves a gradual transfer of autonomy from the upper to the lower state level, relative to the territorial and institutional dimensions (Popa, 2016). This involves pursuing all the advantages, disadvantages and risks involved.

Local government, de facto, contributes to limiting the power of the central government in several ways, thus contributing to the creation of a "limited power", which is a requirement of constitutionalism. In this way, local authorities managing and regulating local issues, take over part of the state power, keeping it away from the central government. At the same time, local autonomy and local powers must be respected by the central government, and local authorities can even attack in court those acts of state authorities that threaten their autonomy. (Cornea, 2017)

According to Chapman, the financial autonomy of the local public administration designates its ability to increase revenues in the local economy and decide how to spend these revenues (Chapman, 1999).

At first, local authorities should be concerned with finding additional revenues solutions at the local level and only if needed, they should be searching funds centrally.

The opinion of Ebohon, Osemwota and Agbebaku is also relevant to the study undertaken, which tells us that autonomy can imply the independence of economic infrastructures from the lower level of government to the higher level of government. Also, autonomy may relate to the independence of the political and institutional structures of the lower level of government (Ebohon et al., 2011)

Any decentralization process is closely linked to the decentralization of financial instruments and techniques and without financial autonomy one cannot speak of a real autonomy of local communities regardless of their level.

Local financial autonomy can be defined as the ability of local public authorities to manage the financial resources available to local communities to meet local public interests.

## 2. The evolution of local financial autonomy in Romania

In order to assess the degree of local financial autonomy, taking into account the concrete situation existing in the local public administration in Romania, with emphasis on the local communities constituted within the territorial administrative units of the country, the financial autonomy of the local public administration can be calculated as the own income ratio of each county in its total budget (Romanik, 2012).

Doing so, I calculated the degree of local financial autonomy for each of the 42 local communities (including Bucharest, the country's capital), in Table 1 finding the values recorded in the period 2015-2018.

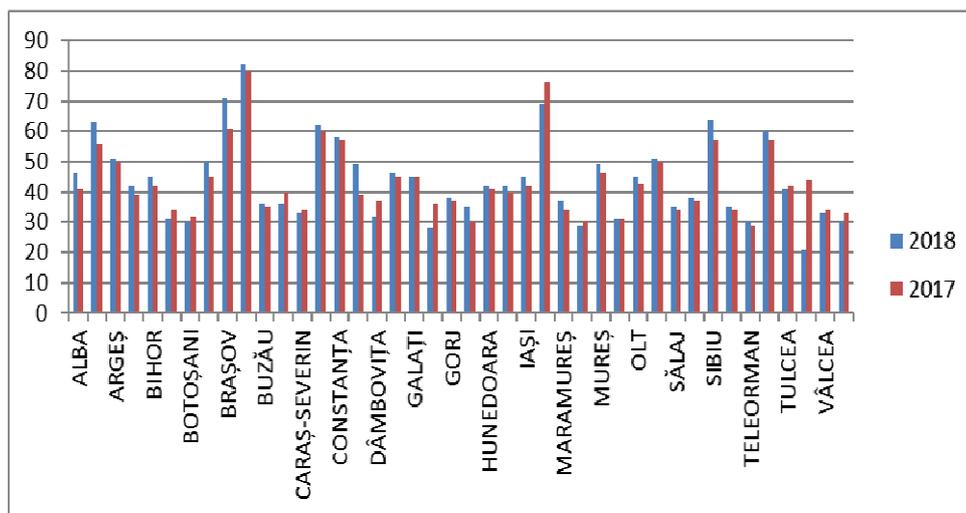
**Table 1:** Local financial autonomy in the counties of Romania between 2015-2018

No.	County	Year			
		2018 (%)	2017 (%)	2016 (%)	2015 (%)
1	ALBA	46	41	42	34
2	ARAD	63	56	51	50
3	ARGEŞ	51	50	48	43
4	BACĂU	42	39	38	32
5	BIHOR	45	42	40	32
6	BISTRIŢA-NĂSAUD	31	34	36	27
7	BOTOŞANI	30	32	28	24
8	BRĂILA	50	45	38	38
9	BRAŞOV	71	61	60	56
10	BUCUREŞTI	82	80	78	81
11	BUZĂU	36	35	34	32
12	CĂLĂRAŞI	36	40	32	29
13	CARAŞ-SEVERIN	33	34	29	27
14	CLUJ	62	60	58	56
15	CONSTANŢA	58	57	57	55
16	COVASNA	49	39	37	28
17	DĂMBOVIŢA	32	37	37	31
18	DOLJ	46	45	43	38
19	GALAŢI	45	45	43	43
20	GIURGIU	28	36	29	26
21	GORJ	38	37	36	35

22	HARGHITA	35	30	27	28
23	HUNEDOARA	42	41	38	29
24	IALOMIȚA	42	40	40	36
25	IAȘI	45	42	38	34
26	ILFOV	69	76	70	68
27	MARAMUREȘ	37	34	37	33
28	MEHEDINȚI	29	30	28	22
29	MUREȘ	49	46	47	43
30	NEAMȚ	31	31	29	29
31	OLT	45	43	43	38
32	PRAHOVA	51	50	64	56
33	SĂLAJ	35	34	33	24
34	SATU-MARE	38	37	39	34
35	SIBIU	64	57	55	52
36	SUCEAVA	35	34	33	29
37	TELEORMAN	30	29	28	27
38	TIMIȘ	60	57	52	52
39	TULCEA	41	42	43	36
40	VASLUI	21	44	25	23
41	VÂLCEA	33	34	29	22
42	VRANCEA	30	33	27	27

Source: Own calculations based on Romanian Court of Auditors reports, [www.curteadeconturi.ro/Publicatii\\_locale.aspx?categ=29.01.2020%2013:03:01](http://www.curteadeconturi.ro/Publicatii_locale.aspx?categ=29.01.2020%2013:03:01)

For an easier understanding, Figure 1 shows the evolution of the degree of financial autonomy based on the latest data, namely in 2018 and 2017



**Figure 1:** The evolution of the local financial autonomy in the counties of Romania in 2018 and 2017

Source: own elaboration based on Table 1

From the analysis of the data presented in the table and chart above, both in 2018 and in 2017, the highest degree of financial autonomy was registered in the country's capital - Bucharest - as expected, followed by Ilfov (2017) and Braşov (2018). At the end of the ranking are Vaslui and Giurgiu (2018), and for 2017, Teleorman and Harghita. This analysis shows that, at the country level, there is a major discrepancy between counties justified by the fact that most capital resources are always concentrated in the capitals of the countries and as a result there is a high degree of financial autonomy.

### 3. Conclusion

Local financial autonomy is an important issue in the global context of economic development and a result of the implementation of the principle of local autonomy and the decentralization process. In European Union legislation, the country is geared towards increasing local financial autonomy. In Romania, the discrepancies between counties are large and in this sense solutions must be sought, reducing development disparities being a topic that arouses the interest of theorists and practitioners, because without local financial autonomy, local public administration will not ensure the efficiency of local government, disadvantaging local development that is causally related to local financial autonomy.

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## ECONOMIC GROWTH, INCOME INEQUALITY AND POVERTY – INSIGHTS FROM EASTERN EUROPEAN COUNTRIES

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**Abstract:** *This paper analyses the relationship between economic growth, income inequality and poverty by observing a set of 5 Eastern European emerging countries during the period 2010 to 2019. Generally, it is found that there might be a positive or negative relationship between growth and income inequality. Additionally, we find that inequality can affect economic growth in a number of complex ways (socio-political instability, under-investment in education, health and capital, poverty). Therefore, economic growth has commonly been viewed as an avenue for poverty reduction. On the other hand, under certain circumstances, there may be a positive short run impact of inequality on growth, but outcomes tend to provide evidence of an adverse mid-term effect enhanced by the social dimension of inequality.*

**Keywords:** income inequality; economic growth; Gini coefficient; poverty

**JEL classification:** O40, O47, D63, I32

### 1. Introduction

The relationship between economic growth and income inequality has always been an area of interest for researchers given the opposite views and contradictory results obtained over time. Since the launch of Kuznets' inverted U-shaped hypothesis, most of the empirical studies point to a significant negative impact of inequality on the growth process. Also, the contemporary literature notes the importance of socio-economic factors such as national income and poverty level that can influence the relationship between the variables (Acemoglu and Robinson, 2013; Berg et. al, 2018). Therefore, this paper aims to evaluate the specific connection between growth and income inequality in Romania and other former communist states in Central and Eastern Europe, asking two questions: What is the relationship between concepts in the analyzed countries? Can it be related to the level of poverty? From an empirical point of view, the preliminary results obtained highlight a predominantly adverse influence of inequality on economic growth in the countries considered, except for Romania which has recently seen an upward trend in terms of economic performance, as well as of income inequality. The rest of the paper is organized as follows: section 2 presents the literature review, section 3 comprises methodology and data and section 4 shows the results. We conclude in the final section.

## **2. Literature Review**

The connection between income inequality and economic growth has been well-studied over the past 25 years with papers reporting a range of results regarding this issue due to the fact that there is neither a theoretical consensus nor consistent empirical evidence that would lead to any convincing conclusion (Kuznets, 1955; Alesina and Perotti, 1996; Barro, 2000; Cingano, 2014). Thus, the debate continues to focus on the idea that the impact of income inequality on the growth process is heterogeneous and can be demonstrated through various transmission channels that produce both positive and negative effects

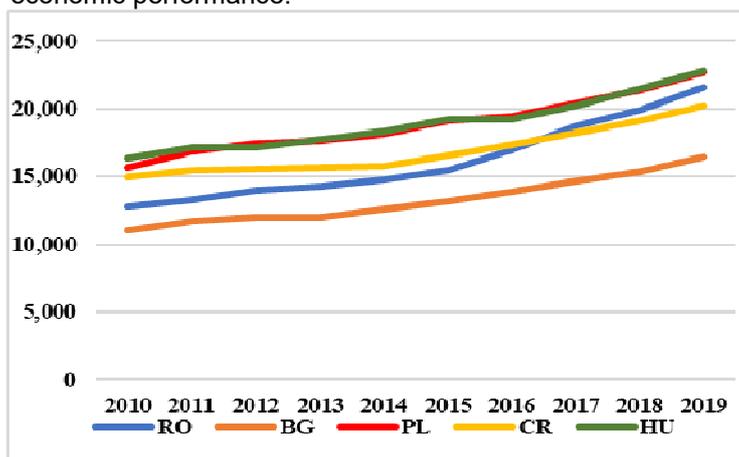
depending on different factors such as market imperfections, living standards and the specificity of the macroeconomic framework (Forbes, 2000; Chang et. al, 2018). On one hand, studies (Anghel, 2017; Oancea, Tudorel and Pirjol, 2017) that have focused on this issue support the idea that inequality have had a strong negative impact in emerging countries from Eastern Europe since the '90s, especially in Romania with the removal of the communist regime, considering that inequality is due to the transition to capitalism. On the other hand, there are authors who suggest that inequality can be addressed by taking into account issues related to reducing socio-economic disparities and promoting cohesion among the population (Ravallion, 2001). Therefore, in the majority of the research papers (Ravallion, 2001; Grundler and Scheuermeyer, 2018) economic growth has commonly been viewed as an avenue for poverty reduction.

## **3. Methodology and Data**

The primary purpose of this paper is to investigate the association between economic growth and income inequality and also the effect of poverty by measuring its intensity. Our full sample of countries for which we have collected the GDP (PPP) and other basic economic data consists of 5 emerging states from East-Central Europe (Romania, Bulgaria, Poland, Croatia and Hungary). These countries were selected in order to study this connection in the former communist states of Central and Eastern Europe by illustrating the overall socio-economic evolution of these economies. Although they are currently at different stages of development, these states have both similarities in terms of macroeconomic background and the process of European integration, as well as differences in economic and social terms. For our data, we focus on the last decade and we draw data from a variety of sources as World Bank databases and Eurostat database, given that they provide quantitative relevant data to our analysis. Secondly, the tools that will be used in this research aim at correlating the economic performance of the economies with the degree of inequality and poverty. The economic performance will be analyzed in terms of national income reflected by GDP per capita expressed in PPP, this being the most commonly used macroeconomic indicator for global assessment of an economy. However, this indicator reflects very little of the income distribution issues within countries. Thus, the degree of inequality in income distribution will be illustrated mainly by the Gini coefficient which determines the extent to which the distribution of income among individuals in a country's economy deviates from a perfect equal distribution. To reflect the overall socio-economic dimension of the countries considered, we will render specific indicators that highlight the level of relative and absolute poverty, including poverty rate, headcount ratio and poverty gap index (Todaro and Smith, 2015).

#### 4. Results

Following the analysis of the economic evolution of the states in terms of GDP per capita (Figure 1), we observe that the countries experienced an upward trend in the period considered, all reaching the maximum threshold in 2019. From this point of view, Hungary and Poland (with very similar trajectories) have seen significant economic growth over the last decade, while Bulgaria had the lowest performance in the middle-income category. As shown in Figure 1, we can also notice that since 2017 Romania has slightly overcome Croatia in terms of economic growth, while the situation was the opposite in the base period. Given Bulgaria's much lower initial income compared to other countries, we expect it to be an explanatory factor of its poor economic performance.



**Figure 1:** Evolution of GDP per capita (PPP)

Source: <https://ec.europa.eu/eurostat/databrowser/view/O/default/line?lang=en>

Secondly, according to the statistics, the Gini coefficient indicates that the degree of inequality in income distribution is very high in the analyzed countries (28.0-40.8%). Moreover, the countries which experienced the highest economic growth (Poland and Hungary) have recorded lower income inequality compared to other states, while Bulgaria and Romania, which recorded a lower but positive growth, occupied leading positions in terms of unequal income distribution.

Regarding the impact of the social dimension of inequality (Table 1), we proceeded by emphasizing the main relative and absolute poverty indicators recorded in 2018 by the sampled countries.

**Table 1. Relative and absolute poverty indicators (2018)**

Country	Poverty rate (half the median household income)	Headcount ratio (%)	Poverty gap (%)	Squared poverty gap (%)
RO	0.179	3.53	0.39	0.85
BG	0.162	1.33	0.30	0.20
PL	0.096	0.35	0.29	0.15
CR	0.038	0.53	0.33	0.26
HU	0.080	0.59	0.30	0.27

Source: <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>

On one hand, results in Table 1 clearly indicate that in Romania and Bulgaria the degree of poverty is significant given the large number of individuals living below the poverty line, but especially the ratio by which the average income of the poor falls below this threshold, illustrated by the poverty gap. For the other states, the first categories of indicators show a lower level of poverty compared to Romania and Bulgaria, although similar values of the poverty gap in all countries indicate a depth of this phenomenon at the national level, illustrating an average distance of 0.32% from which the income of the poor diminishes from the poverty line. In addition, analyzing these results with those previously obtained, we conclude that the countries that experienced the highest income inequality in terms of Gini coefficient, namely Bulgaria and Romania, also recorded high levels of poverty, while countries with lower inequality (Poland, Croatia and Hungary) had lower poverty rates. In terms of economic growth, countries with low levels of inequality and poverty experienced high growth rates, and countries such as Bulgaria where income inequality and poverty were considerable, marked significantly lower growth. However, despite a high degree of inequality and poverty, Romania recorded a higher GDP per capita in 2019 than Croatia, a country where inequality and poverty were significantly lower, which leads us to believe that under certain conditions and influenced by variations in the level of development, a positive relationship between the concepts can also be manifested.

## 5. Conclusions

This preliminary revision of both theoretical and empirical literature regarding the relationship between income inequality and economic growth, both with respect to cross-country studies and to work explicitly focused on former communist states from Eastern Europe, has provided us with a suitably well-developed lens through which to discuss the analysis of inequality and growth. The central finding of this paper suggest that sustainable economic growth generally interacts with low levels of income inequality and poverty. For developed countries such as Poland and Croatia, we intuitively claim that reducing inequality can contribute to making growth more sustainable and inclusive. In the case of Bulgaria, poverty and inequality may interact to have a negative impact on growth. Nevertheless, the association between income inequality and economic growth in Romania reflects a potential positive relationship between concepts fostered by poverty while a negative correlation in the case of the other economies was observed.

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- <http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>

# ANALYSIS OF THE INTERACTION BETWEEN FRAUD AND TAX EVASION UNDER THE IMPACT OF FISCAL POLICIES CHANGES

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**Abstract:** *The main studies on the phenomena of tax fraud and evasion start, specifically from the economic and legal components, but the real problems are much more complex, a context in which it is necessary to analyze the interaction between the two phenomena, related to the effects caused and felt both economically, as well as social. As so far, no mechanisms have been identified to completely eliminate these phenomena, although their causes and effects have been analyzed, the chosen topic is topical and of interest to all actors in the economic environment viewed broadly and legally. At the same time, the permanent change of fiscal and economic policies is the main factor that justifies the need for a continuous analysis of the phenomena of tax fraud and evasion, as well as the interaction between them. In order to outline our research and to see the interest given on the researched topic, the articles published on this topic, the topics of interest, we conducted a bibliometric analysis of existing studies on tax evasion and fraud, indexed by the Web of Science database. With the help of the VOSviewer program we created scientific maps to outline the boundaries of the southern field, cooperation between countries, as well as a scientific keyword map for publications of interest. The results of the bibliometric analysis provide tools in the evaluation of existing researchers.*

**Keywords:** fraud; tax evasion; fiscal policies; bibliometrics.

**JEL classification:** G41

## 1. Introduction

In development out our research, we intend to add value to the specialty literature to reflect the state of knowledge on this topic. We consider that tax fraud and evasion, and the interaction between these two concepts, under the rule of multiple fiscal policies that are constantly changing, is a topic that has not been enough explored in the literature. Previous studies offer many directions for future research, but do not provide empirical results.

Our purpose is to make an effective contribution to improving methods of preventing, combating, mitigating and sanctioning tax evasion and fraud, which should ultimately be reflected in legislative proposals aimed at eliminating some of the existing gaps, improving the fight against evasion, tax fraud and aggressive tax planning, as well as strengthening the efficiency of tax collection and tax equity.

## 2. Brief review of the literature

In the literature (Minea, et al. 2006, pp. 8-12), the authors noted that in any democratic state, taxpayer is considered to be a subject of good faith and, as a result, tax obligations that they assumes (declaring them in the fiscal declaration) is the foundation on which the tax administration is based when it setting taxes (Grosclaude and Marchessou, 1999, pp. 8-9). Problems arise when some taxpayers try to position themselves in such a way as to evade the correct fulfillment of tax obligations. There have been and will continue to be taxpayers who - determined by various interests (often personal) and valuing their inventiveness - have tried and will try to reduce their tax obligations, a goal for which they sometimes resort to the most ingenious and varied methods. Some categories of people are sometimes "stimulated" in such an approach and burdensome tax legislation (Florescu et.al. 2005, pp. 118).

The facts of those taxpayers who manage to evade from the tax law some incomes and / or taxable goods outline the evasion, dangerous and extremely harmful phenomenon for the economic-financial field and, in general, for the national economy and society.

In fact, the evasion from fulfilling the financial-budgetary obligations can be achieved in different ways: by interpreting the fiscal legal norms in favor of the taxpayer, by placing the taxable matter (or a part of it) outside the scope of the legal provisions on taxation, by concealing the taxable object consisting in the underestimation of its amount or by the brutal (direct) defeat of the fiscal provisions. Thus, the definition from the beginning of the 20th century in the Romanian doctrine remains perfectly valid, according to which tax evasion is the set of licit and illicit procedures by means of which taxpayers or other interested persons evade - totally or partially - their wealth, obligations established by fiscal laws. Similarly, in the Anglo-Saxon countries a distinction is made between tax avoidance which materializes in circumvention of legal provisions in the field of taxation and tax evasion which is disregard of the law by violating its provisions.

As far as we are concerned in the way we proceed in the activity of avoiding the effects of fiscal regulations, the doctrine differentiates between the so-called "legal" tax evasion and the fraudulent tax evasion or tax fraud.

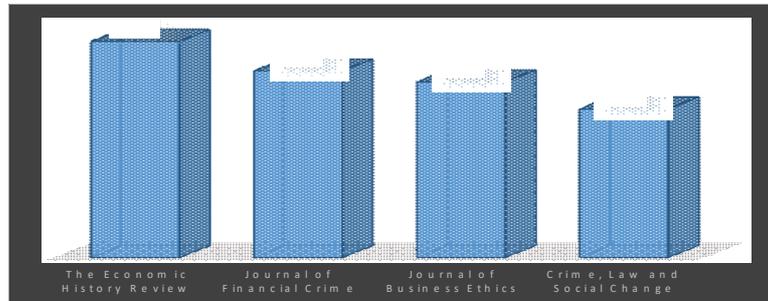
Fraud, on the other hand, does not respect either the letter or the spirit of the law, it entails criminal liability. Fraud is an action that is intentionally undertaken by employees, top management, with the ultimate goal of obtaining incorrect or illegal benefits. Both creative accounting and fraud are considered intentional actions. (Safta et.al 2020, pp.90-107).

Objectively, the legislation in force cannot cover, by express provisions, all the categories of social relations that can take place in a certain period of time; the legislator mainly aims at regulating those social relations that have a higher frequency or a greater importance in the society. Therefore, only those acts and deeds are sanctioned which, being directly covered by the legal norms, are incriminated as such. Deeds that do not fall under these legal norms cannot be legally sanctioned (they are only morally condemned) and, consequently, they are temporarily tolerated (until the moment of their express incrimination by law); from this state of affairs, evasionists understand that any act not expressly incriminated is permitted by law.

### 3. Bibliometric analysis, methods and results

For this part, we focus on existing research both nationally and internationally, conducted by specialists. We will also refer to the contribution made to the specialized literature through the bibliometric analysis on this topic. Starting from the bibliometric analysis, we will move on to the detailed analysis of the specialized literature.

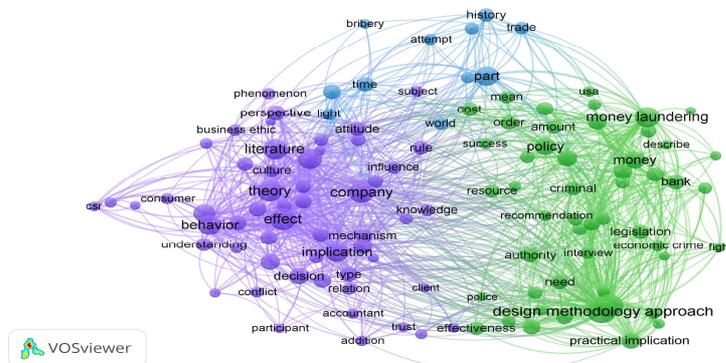
At the same time, the information provided reveals a way in which we can visualize the results as clearly as possible in the form of scientific maps. Through this analysis we test the quantitative aspects of the information.



**Figure 1:** Journals

Source: Web of Science's own database processing

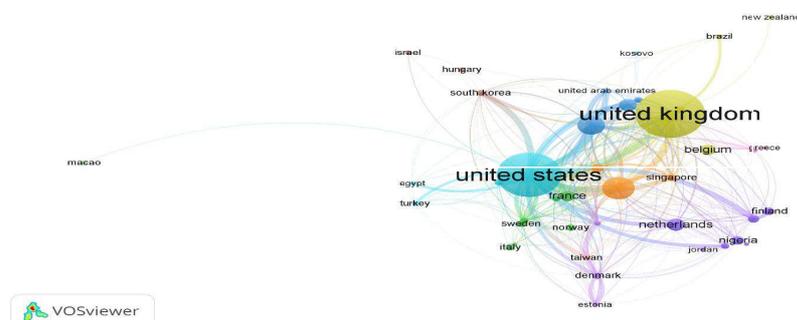
Figure 1 shows the frequency of publication in various specialized journals. The selection for the graphic presentation was made for countries with a frequency greater than or equal to 15 in the number of publications on this topic. In the following we will present the bibliometric analysis based on the use of the similarity method for the creation of scientific maps. These are a symbolic representation of the scientific fields, in which the elements presented on the map are associated with subjects or themes. To make these maps, I used the VOSviewer program. This software processes data downloaded from the Web of Science.



**Figure 2:** Scientific map of the "tax evasion" keyword group in publications

Source: Web of Science's own database processing

Figure 2 is a view of the clusters of publications that contain the keywords by which the articles were searched. Keyword analysis helps the author to get information about factors related to the problem of tax evasion. The size of the circle represents the weight: the larger the circle, the heavier it is. The color of the circles determines the cluster to which the keyword belongs. The correlation between the keyword and the other terms is reflected by the distance between the circles. The closer the keyword is to the terms, the stronger the relationship.



**Figure 3:** Scientific map for the origin of "tax evasion" publications  
Source: Web of Science's own database processing

In Figure 3, we can see the countries that deal with more intensive research on this topic, regardless of the words after which the search was performed. The USA employs the most subjects of this nature, followed by the Netherlands, Nigeria, Denmark, Sweden.

#### 4. Conclusion

Over time, there have been different conceptual approaches to tax evasion. According to the authors Achim and Borlea (2019) and Schneider, 2013, 2015 and Medina and Schneuder, 2018, tax evasion is an important component of the underground economy, when the purpose of the underground economy is to avoid legal regulations to pay less taxes and state taxes. With the help of this bibliometric analysis, economic problems are solved at an interdisciplinary level, bringing a different point of view to our research.

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## DARK TOURISM AND THANATOURISM – ISSUES OF THE DEFINITION

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**Abstract:** *An increasing touristic phenomenon word wide in the past three decades which consist in visiting places associated with death, disasters and suffering is being sightly conceptualized. Dark tourism and thanatourism are two exchangeable terms that tend to be used as one when referring to the act of tourism to the places mentioned above. Two close concepts associated on a such high level that it is almost impossible to talk about one without considering the other, the absence of clear boundaries between them and the conceptual gaps play an important role in conceptualization these forms of tourism. The aim of this paper is to review the concepts of dark tourism and thanatourism, highlighting their similarities and differences based on a close literature review. This paper presents no empirical data, but it is more a piece to summarize a conceptual research.*

**Keywords:** dark tourism, thanatourism, concepts in tourism, history, macabre tourism, tourist motivations

**JEL classification:** Z30

### 1. Introduction

At a first glance, dark tourism and thanatourism may seem referring to the same actions and being the same concept. In the past three decades an interest in death, atrocities and disaster related places have increased, leading to the urge of trying to conceptualize the act of visiting that kind of places. To what may seem regarded as a contemporary phenomenon, dark tourism has its roots in the dawn of time, since the pilgrimages and gladiator fights. There are numerous paper works and studies related to dark tourism and thanatourism in the past years, although there aren't any official statistics on how many people participate in this form of tourism every year. Outside the academic environment, Netflix's documentary series "Dark Tourist" or HBO's drama "Chernobyl" are two of the latest and well known promoters of dark tourism, which helped it in becoming more visible to the public and certainly draw a lot of attention to some specific sites.

With the appetite for such destinations growing and a fascination for the darker side of history, the motivation of tourist has significant diversified. Dark tourism can be seen as a sober, non-sensational and educational manner to bring the dark side of history to light and a better insight of the evil act humanity is capable of. Thanatourism is seen with a longer historical lineage and it implies the interest of the tourist to be part of the ongoing event, to feel that he is part of that sorrow experience. As an example, the typical war zone tourist would want to experience as close as possible the thrill of the battle event such as a medieval battle.

The unclear boundaries between dark tourism and thanatourism and the lack of a universal accepted definition lead to a conceptual gap. This paper aims to provide a general overview of these two concepts, highlighting their similarities and differences based on a close literature review. This paper presents no empirical data, but it is more a piece to summarize a conceptual research.

## **2. Defining dark tourism**

Academic literature in dark tourism developed over the last three decades, and according to Duncan Light (2017) "the relationship between tourism and death has now become a mainstream research topic within tourism studies and tourism management". When it comes to terminology of dark tourism, based on the numerous terms used to define a specific act of tourism, in the academic literature we can find terms such as: prison tourism (Strange & Kempa, 2003); genocide tourism (Beech, 2009); grief tourism (O'Neill, 2002; Trotta, 2006); disaster tourism (Van, Wallis, Docrat & De, 2010; Miller, 2008); pagan tourism (Laws, 2013); suicide tourism (Dyer, 2003); atomic tourism (Tufnell, 2012); conflict heritage tourism (Mansfeld & Korman, 2015) and difficult heritage tourism (Logan & Reeves, 2011) and dystopian dark tourism (Podoshen, Venkatesh, Wallin, Andrzejewski & Jin, 2015). Having such various terms to define visiting places associated to death, sorrow and a negative aspect of the life makes dark tourism an "umbrella" term.

Even the name itself, dark tourism, is an attention grabber and eyebrow raiser when it comes to unfamiliarized people with the concept. Hard to understand its underlayers, dark tourism is a criticized term only based on the idea that it's different, in a macabre way, than the other known forms of tourism but the sole mention of death brings shivers and panic to some people.

The "dark tourism" term was first pointed out by Foley and Lennon (1996b) as a "tourist interested in recent death, disaster and atrocity" borne of a "fundamental shift in a way in which death, disaster and atrocity are being handled by those who offer associated tourism products". However, they were not the first to refer to death related destinations. Rojek (1993) called this concept of visiting death related site as "black-spots", or "the commercial developments of grave sites and sites in which celebrities or large numbers of people have met with sudden and violent death" (1993:136).

## **3. Defining thanatourism**

Thanatourism etymology comes from the Ancient Greek word "thanatos" which means death. Contemplation of the death is the base of thanatourism, a form of grief tourism. This kind of behaviour is presented in almost every religion, but each religion has a different approach to death. Pilgrimages are not referred as thanatourism as the main form of tourism, but as religious tourism.

Seaton (1996) has defined thanatourism in a different way such as: "travel to a location wholly, or partially, motivated by the desire for actual or symbolic encounters with death, particularly, but not exclusively, violent death" (p.240). This exclusive definition and presentation on death means that thanatourism is narrower in scope than dark tourism.

The same as dark tourism, thanatourism has been given other terms to refer to such as: thanatourism (Seaton, 1996; 1999; Dann & Seaton, 2001; Hartmann, 2014); morbid tourism (Blom, 2000) and black-spot tourism (Rojek, 1993).

Most researchers embraced the concept of dark tourism rather than thanatourism, the academic literature is not that various when it comes to thanatourism and researchers avoid the idea of trying to conceptualize it. Thanatourism is seen with a longer historical lineage and it implies the interest of the tourist to be part of the ongoing event, to feel that he is part of that sorrow experience. As an example, the typical war zone tourist would want to experience as close as possible the thrill of the battle event such as a medieval battle. Thanatourism is nothing more than a summarize of travel practices motivated by the desire to meet death. Most researchers conclude that thanatourism is just another term under the umbrella of the “dark tourism”.

#### **4. Conclusions**

A serious debate around dark tourism and thanatourism must refer to how ethical it is for tourism

to benefit from death, suffering and macabre (Garcia, 2012).

Although the academic literature remains eclectic and theoretically fragile, raising more questions than answers, there were important differences between dark tourism and thanatourism as they were originally designed (Hartmann, 2014, Seaton, 2009a). Foley and Lennon (1996) focused on the ‘supply’ dimension of dark tourism and the ways in which places of death or suffering are presented to, and interpreted for visitors (with particular emphasis on issues of ethics, commodification and appropriateness). They made an assumption that any site that is associated with death is by default dark. Oppositely, Seaton's vision of thanatourism was behavioural rather than essentialist and he focused on the motivations of tourists to visit places associated with death. The ways in which such places were presented to their visitors weren't part of the vision of thanatourism. These differences are not insignificant, although many researchers subsequently tended to treat dark tourism and thanatourism as the same thing as Light (2017) stated.

The analysis of the academic literature has been the methodological instrument used in writing this paper. Most of the published papers in this domain are case studies of the theoretical aspects. As a conclusion of the academic literature review, I identified as the main result of the studies concluded in the past decades, the classification of dark tourism. This spectrum of dark tourism starts with a “lighter” part (for examples Memorial Museums of Holocaust situated on the territory of the USA) and ends with the “darkest” part of the dark tourism (as a parallel example, Auschwitz – Birkenau is the darkest point of dark tourism in Europe, if not in the world). The Holocaust can be considered, without hesitation, the best representation of dark tourism in all its forms hidden under the “umbrella”. This classification of dark tourism is based on authenticity, on how macabre the destination is perceived and on the quality and intensity of the experience the destination can give.

Death and suffering had been transformed into tourism symbols, whereas the places assimilated to dark tourism nowadays are related to heritage and cultural tourism. Having as purpose the economic well-being of the area where a dark

tourism site is located might distract the attention from the negative and unethically side of dark tourism. There is evidence of greater curiosity from the tourists part and from the business development point of view. Overall, dark tourism has been promoted as commercialization of grief and death which has become the center of attention and attraction.

From my point of view and based on the review of the academic literature, dark tourism includes thanatourism, thanatourism is manifesting as a branch under the bigger umbrella of dark tourism. Two close concepts associated on a such high level that it is almost impossible to talk about one without considering the other.

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# TODAY'S CHALLENGES, TOMORROW'S OPPORTUNITIES: THE CASE OF THE GLOBAL LABOUR MARKET AND COVID-19 IMPACT - AN OVERVIEW OF THE JOBS AND SKILLS OF THE FUTURE

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**Abstract:** *The pandemic is the biggest challenge that companies are facing in this moment because it forces them to adapt to this new reality which determines changes in the whole way of working. The paper is going to focus on what changes have occurred on the labour market and most important on the skills employees need to develop during and after this difficult period. The question we raise in this paper is: How will the future of work look like regarding the skills of employees? To begin, the paper is going to emphasize the literature review approach to the research and, afterwards, to present some essential skills which became vital because of this period. The purpose of the paper is not only to present some theoretical aspects, but also to explain why the previously mentioned skills became so important.*

**Keywords:** Pandemic; employees; skills; challenge; work; future.

**JEL classification:** I15, M21, M54, O15

## 1. Introduction

Nowadays we are forced to continue with our daily activities in the middle of a global multiple crisis: economic, health, and climatic.

Covid-19 has affected a lot of sectors and industries from all over the world in the last year and consequently major changes were made on the labour market and in the way of working.

One of the problems, at the moment, is that the pandemic will not only affect the labour market now, it will also have negative effects in the future. Most probably, the things won't return to the way they were before the pandemic and that is the reason why we have to learn how to adapt and also live with the changes generated by COVID-19.

Now we have to get used to this new normality in which we try to integrate our older activities, new ways of working and also opportunities to develop new skills that can help us to become more competitive in an economic context that seeks stability.

## 2. An overview of the jobs and skills of the future

The COVID-19 pandemic has been widely determined to be both a health and an economic crisis, with updates of progression addressing losses of lives and of jobs.

According to the World Economic Forum, the pandemic-induced lockdowns and related global recession of 2020 have also created a highly uncertain outlook for the labour market and accelerated the arrival of the future of work (WEF,2020).

The McKinsey Institute, which tracks global economic trends, suggests that COVID-19 has moved the conversation about the future of work into the present, accentuating the need for a long-term perspective that does not just rebuild from past models, but develops strategies that create resilience for future crises. Additionally (Hite and McDonald, 2020) consider that preparing for the “future of work” has gone from a distant hypothesis to a very immediate priority.

(Hite and McDonald, 2020) consider that after years of studies proposing flexitime and working from home options, COVID-19 reinforced that some jobs can be done from home, and that people can meet on-line more cost effectively and safely than travelling to other parts of the country or world.

From another point of view, as companies look ahead to an eventual reopening, they are thinking about how to operate safely, given the need to prevent wider outbreaks and build consumer confidence. This may involve reconfiguring shared office spaces, adding plexiglass screens between customers and frontline workers, acquiring adequate supplies of personal protective equipment, creating new health protocols, or shifting more work online. (Lund et al, 2020)

Not to mention that millions of workers have experienced changes which have profoundly transformed their lives within and beyond work, their well-being and their productivity. According to the Economic World Forum, developing and enhancing human skills and capabilities through education, learning and meaningful work are key drivers of economic success, of individual well-being and societal unity.

The crisis has caused hundreds of thousands of fatalities, tested the limits of health systems, and has put the world in a great lockdown where the global economy is experiencing the worst recession since the Great Depression. With social, economic, and health systems on the verge of collapsing, it is impossible to know what the new world will look like, but its shape will depend on the decisions leaders make now (Dirani et al., 2020). Therefore, leadership competencies are critical to respond under pressure and during times of uncertainty. (Li et al., 2020)

It also appears increasingly likely that changes to business practice brought about by this pandemic are likely to further establish entirely new ways of working, and that the second half of 2020 will not see a return ‘back to normal’ but will instead see a return to ‘the new normal’(WEF,2020).

According to McKinsey, LinkedIn’s 2020 Workplace Learning Report endorses this, revealing that 99 percent of learning and development executives believe that, if skill gaps are not closed in the next 3 to 5 years, customer experience and satisfaction will be affected as well as product development and delivery, and the company’s ability to innovate – resulting in an erosion of growth. The LinkedIn report also cites that 57 percent of talent developers will focus on leadership and management skills, 42 percent on creative problem solving and design thinking skills and, 40 percent on communication skills.

### **3. Skills employees need to develop in a post-pandemic business world**

We are all affected by the way in which the pandemic is changing the face of the labour market and more exactly the way of working. The biggest problem in this

moment is that we are not able to predict what is going to happen in the near or distant future. However, it is important to be prepared for the change which will take place and, in order to do that, everyone should focus on developing new skills and abilities. I am going to present some of the most essential skills a person should develop to better face the current and future challenges happening on the labour market.

- Leadership

*A huge number of companies were forced to shift to remote working because of the pandemic. In this situation, it is more important than ever for team leaders and managers to develop leadership skills because they have to manage, motivate and also inspire their employees from a distance.*

- Flexibility and adaptability

*The pandemic has taught us an important lesson: We have to be prepared to adapt as fast as possible to any new situation which could affect us in professional or personal perspective. Because the pandemic will change the way of working, companies will look for employees who are able to adapt quickly to unexpected changes.*

- Critical thinking

*In this kind of moments, it became very important to focus only on the official information without taking into consideration fake news. The employees of the company must be very well informed when they are taking decisions and this could be possible by developing critical thinking skills.*

- Emotional intelligence

*According to the European Commission, emotional intelligence is the ability to understand and be aware of your emotions and those of others. It has several components – awareness, perception and regulation, but essentially, it's about leading through empathy, influence and collaboration. (EC,2020)*

*Additionally, the European Commission also highlights the fact that the post-pandemic business world can be full of uncertainty and challenges, and companies will need emotionally intelligent leaders to help their workers navigate through these difficult times.*

- Creativity and innovation

*The pandemic represents a crucial moment in which companies either consolidated or collapsed. Companies had to find a way and also a good strategy to adapt to the changes and to reinvent their activity. In the near future, companies will look more for employees who developed their creativity in order to create new products and services to be sold in the present circumstances.*

- Commit to a Lifetime of Learning

Unfortunately, because of the pandemic, there is a huge number of employees who were forced to switch to another field of activity or to reintegrate in other companies. There were also a lot of employees who have lost their jobs during this difficult period. In both cases, employees should understand the concept of “Committing to a Lifetime of Learning” and should focus more on permanently developing new skills and learn new information. Nowadays, all of us could take advantage of the unlimited resources we can access and learn as many new things as possible.

#### 4. Conclusion

The fight for employment will be tougher than before because companies are trying to find but also to keep those employees who already have some of the skills presented above. Another important fact is that companies will also search employees who are able to quickly develop new skills and abilities depending on a specific situation.

From another perspective, it is mandatory for companies to focus on the employee's development because it is the first step to ensuring that the organization's recovery strategy is a success. We have to get used to the new normality, and be aware that this situation will last and will also have effects in the future. Past crises taught companies that they must act quickly to build up critical workforce capabilities.

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## THE IMPORTANCE OF SMEs/SMBs IN EUROPE AND ROMANIA

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**Abstract:** *In every country, in every economy we can withstand that SMEs/ SMBs are an integrant and important part of business sector. All around the globe we see in a minor or more important proportion and understand the role that SMEs are playing. The purpose of this research is to point out the importance of SMEs in EU and Romania. It may also aim to be a starting point for a wider, future research regarding the evolution and the impact which these businesses have. On the theoretical part, Google Academic/Scholar platform was mainly used. In this database were found a significant number of articles and papers regarding the importance of SMEs which have helped in the process of realizing this paper. The results were obtained by analysing the information provided by the Small Business Act 2012 and 2019 for Romania and EU. These results may be helping in a better understanding of the impact which these SMEs have both in EU and Romania. Also, to understand a certain dynamic that was happening in 2018 compared to 2011 and again may be consisting in a future basis for a more ample research in this area.*

**Keywords:** SME, SMB, role, economy, importance

**JEL classification:** A14; M20; O10; P12.

### 1. Introduction

SMEs are seen as the main actors of both national and regional development in many countries. The importance of the SME sector is well recognized worldwide due to its significant contribution to gratifying various socio-economic objectives, such as higher growth of employment, output, promotion of exports and fostering entrepreneurship (KESKÎN et al., 2010).

The importance of SMEs/SMBs in economy, under various aspects, was debated by a number of researchers such as: Ghobadian and Gallear (1996), Ladzani and Vuuren (2002), Piech (2004) and others.

Their importance stretches across a variety of an economy subdivisions such as employment, import, export, added value etc. The text below is merely a glimpse, a starting point, with its limitations, in an area with a more vast and complex system.

With their advantages and also, of course, their disadvantages, in Europe's economy and also in Romania's, these businesses make no exception in having a major and relevant role.

According to European Commission Small and medium-sized enterprises (SMEs) are defined in the EU recommendation 2003/361. The main factors determining

whether an enterprise is an SME are staff headcount and either turnover or balance sheet total.

In order for a business to be considered an SME/SMB it should have less than 250 employees, a turnover equal or less than 50 mil. Euros or a total balance sheet equal or less than 43 mil. Euros.

## **2. Contributions of SMEs/SMBs**

Small and medium-sized enterprises are deeply woven into the fabric of Europe. They are essential to Europe's competitiveness and prosperity, as well as economic and technological sovereignty (according to Unleashing the full potential of European SMEs, 2020). According to Facebook/OECD/World Bank (2020), The Future of Business Survey, the crucial contribution of SMBs to the global economy is well documented:

- Contribution to global economic growth: SMBs make a significant contribution to economic growth around the world, accounting for the majority of employment and creating on average between 50% and 60% of value added (for example, through wages, profits, and taxes) in high-income countries.
- Having similar shares in developing markets (OECD 2017) SMBs are vital contributors to local economies, utilising local resources and fostering employment opportunities across the supply chain.
- Fostering innovation: They are often responsible for advances in products, production methods, and management processes through breakthrough innovations themselves (for example, OECD 2018 or European Commission 2019) and also by seizing technological opportunities neglected by larger firms (OECD 2010).
- Promoting environmental sustainability: SMBs are well positioned to seize opportunities involving greener supply chains in local clean technology markets, including in developing countries, which may be less attractive for large global firms (World Bank 2014).

Despite their agility, because of their smaller scale and more limited access to resources, SMBs also face a number of challenges. Even in a healthy economy, they may face unique financial, supply chain, network, and resource constraints. For example, according to Facebook/OECD/World Bank (2020), The Future of Business Survey we can observe a series of challenges such as: Reduced access to credit and financial resources: SMBs are less likely than large firms to be able to access finance, due to factors such as a limited credit history and lack of detailed financial information. Technological adoption lags: While their flexibility facilitates innovation in organisational structures and delivery models, factors such as financing concerns and skills availability can result in technological adoption lags within the SMB sector (OECD 2018). Access to global markets and knowledge networks: SMBs are typically less able than large firms to bear the costs of engaging in international trade or to access external markets and resources, both of which may entail significant regulatory and administrative costs (Fliess et al. 2006).

### 3. Strengths and weaknesses

Some of the strengths and weaknesses according to Neagu, 2016:

- The SMEs sector is the main source of forming the middle class with a decisive role in maintaining the social-political stability in a country. This fact is possible because the distribution of economic power by the system of small and medium sized companies lead to a favourable distribution of power in society.
- It combines factors of production that, in other conditions, probably wouldn't be used, like local resources or secondary products of big companies. The SMEs cooperate with the big companies, fact that is shown by partnership agreements (financially, technologically and so on) or by the form of supplies (of capacity, of specialty and so on).
- They have reduced capital which makes them vulnerable in case of economic shock.
- High rate of dependence to a group of clients (for example: the subcontractors).

### 4. Importance and impact in Romania and EU

The purpose of this relatively small research is to point out the importance of SMEs in EU and Romania. Being a narrow research, it may also aim to be a starting point for a wider, future research regarding the evolution and the impact which these businesses have. On the theoretical research part was used the Google Academic/Scholar platform. On this database were found a significant number of articles and papers regarding the importance of SMEs which have helped in the process of realizing this article.

On the other hand, for the following results, was used mainly the database website of ec.europa.eu with the reports corresponding to SBA 2012 and 2019 for Romania and EU. These results may be helping in a better understanding of the impact which these SMEs have both in EU and Romania. Also, to understand a certain dynamic that was happening in 2018 compared to 2011 and again may be consisting in a future basis for a more ample research in this area.

**Table 1:** SMEs in Romania an EU in 2011

2011	Number of enterprises			Number of employees		
	Romania		EU	Romania		EU
	No.	%	%	No.	%	%
Micro	475.536	89,6%	92,2%	993.079	24,9%	29,6%
Small	45.131	8,5%	6,5%	840.848	21,1%	20,6%
Medium size	8.348	1,6%	1,1%	843.021	21,2%	17,2%
SMEs	529.015	99,7%	99,8%	2.676.948	67,2%	67,4%
Large	1.527	0,03%	0,02%	1.304.963	32,8%	32,6%
Total	530.542	100%	100%	3.981.911	100,0%	100,0%

Source: SBA Fact Sheet 2012 Romania

It can be observed in the table above the fact that Romania is situated below the European average percentage regarding the number of enterprises and the

number of employees that corresponds to micro-businesses. On the other hand, Romania is situated above the EU regarding the percentage corresponding to the number small and medium size enterprises (8,5 and 1,6 versus 6,5 and 1,1). The total percentage of employees in Romania of the SMEs is almost equal with the EU's with a small difference of 0,2 percent for the latter.

**Table 2:** SMEs in Romania and EU in 2018

2018	Number of enterprises			Number of employees		
	Romania		EU	Romania		EU
	No.	%	%	No.	%	%
Micro	430,925	88.4%	93.0%	930,720	22.8 %	29.7 %
Small	46,299	9.5%	5,9%	903,635	22.1 %	20.1 %
Medium size	8,533	1.8 %	0,9%	857,129	21.0 %	16.8 %
SMEs	485,757	99.7 %	99,8%	2,691,484	65.8 %	66.6 %
Large	1,667	0.3 %	0,2%	1,397,566	34.2 %	33.4 %
Total	487,424	100.0 %	100%	4,089,050	100.0 %	100.0 %

Source: SBA Fact Sheet 2019 Romania

In 2018, situation is a bit different, in terms of discrepancy regarding micro and small business percentage, the difference is around 4,7% compared to an only 2,6 in 2011. The gap between percentage of employees in micro enterprises increased to almost 7% in 2018 compared to a 4,7% in 2011. Also, in terms on total SMEs employees, the percentage both in Romania and EU have dropped, with a smaller rate in EU case (0,8% versus 1,8% in Romania's case).

In 2014-2018, overall SME value added in Romania grew by 43.1%, with micro firms generating the highest increase, at 63.1%, while SME employment increased by 7.0%. However, the average productivity of Romanian SMEs is approximately €15,100, significantly lower than the EU average of approximately €44,600 (according to SBA Fact Sheet 2019 Romania).

## 5. Conclusions

With a withstanding proportion of 99.7%-99.8%, in terms of enterprises number across Europe and Romania, SMEs/SMBs have their rightful place of being a relevant part in economy. Their decisions, and also the policies that are intended directly or indirectly to them could impact in a major way the lives and families of hundreds of thousands of people, refereeing to, but not limited to: employment area, wages, innovation.

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## CORPORATE GOVERNANCE AND FAILURE – A BIBLIOMETRIC REVIEW

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**Abstract:** *The paper will approach a brief bibliometric review. We want to observe the links between the published articles, regarding „corporate governance” and “failure” in the literature, and to conclude which are the related topics, whit the least publications. The data were collected from” Web of Science” in the total of 805 articles. They were bibliometric analysed with the use of the Vosviewer program. We obtained a map formed of five clusters. The total links between the clusters are 537. The results show the potential for the future studies, due to the correlation that can be observed in the map.*

**Keywords:** corporate governance, failure, bibliometric review, Vosviewer

**JEL classification:** G3

### 1. Introduction

Corporate governance has various approaches in the literature. One that is commonly used was stated by Shleifer and Vishny in 1997, saying that it refers to the way the „suppliers” of the company are assured that the well deserved benefits will return back to them (Achim, Borlea, 2020,p.189). The Organization for Economic Co-operation and Development states that corporate governance is a way in which the companies are controlled and administrated. It defines the way in which each participant on behalf of the company share their responsibilities and rights. (Monica, Borlea, p.140, 2019).

The big scandals, which are mention in the literature, raised issues regarding the “good” corporate governance practices and ethics (Salah A. et al, 2020, p.2). A brief definition of fraud was given by Garry (p.94, 2014): “international deception for personal gain”. Fraud is an action that is intentionally taken by employees, top management, with the goal of obtaining incorrect or illegal benefits.

A good corporate governance could indicate the presence/ absence of financial fraud, so in the end failure. Using a bibliometric review on the topic of corporate governance and failure will show us, depending on the keywords used, which are the common corelations that were made in the literature.

The interest in this research was to observe what is the context of articles published on the topic of corporate governance and failure, and to see which are the areas in which there are opportunities of new publications.

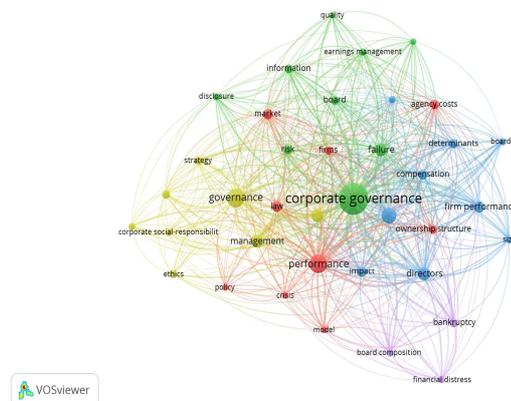
## 2. Methodology and Results

The Vosviewer software is a tool, which creates maps based on the network data that are uploaded.

It can be used to create visual maps of „the scientific publications, journals, researchers, research organizations, countries and keywords”. (Manual Vosviewer, p.4). The data, which are uploaded to compute the maps, can be extracted from „Web of Science, Scopus, Pub Med or Dimensions”. (Manual Vosviewer, p.4). For the current study, we downloaded network data from the Web of Science platform, to obtain the bibliometric results.

We looked for articles that contained the keyword „corporate governance and failure”, and we found 804 results. The data, which were downloaded, were uploaded in the program, and filtered to obtain the map by connecting the articles through co-occurrence and all keywords from the articles, with a frequency of 20 times. The result is reflected in Fig.1.

In the end, based on these specifications, the program has selected a total of 38 words, which were representative for the subject from all the downloaded articles.



**Figure 1:** Bibliometric map of the links between the keywords  
Source: Own Processing

One of the Vosviewer program characteristics is that it selects the resulted words into groups, named clusters. For our research, it resulted five clusters. According to the Manual developed by Nees Jan van Eck and Ludo Waltman cluster a cluster is „a set of items included in a map” (p.6). It is important to know that a word can be included in only one cluster, and the cluster do not overlap. The size of a cluster (the dot) shows us the frequency of a certain word. So, the bigger the dot, the higher the frequency.

*Cluster 1 – performance* is formed by a total of 9 words. The words that are included in this cluster are: policy, ownership structure, model, market law, firms, crisis and agency costs. Performance is the most frequent word, so this will give the name of the cluster. It is directly linked with all the words from the cluster, but also with other 27 words from the other 4 clusters.

Words from the same cluster are considered to have a direct link. Links to words from other clusters are indirect. All the links that this word has, symbolises the

articles that were written in the literature in the context with corporate governance and failure. This means that we have a relationship between these words.

The size of the dot, representing a certain word, illustrates the frequency of that word, used in the selected articles. So, for example the word performance is linked with the word board composition. On one hand, the first has a big dot, compared to the second, which has a very small one. This underlines the opportunity on conducting new research on this connected topic. Only a few studies were made, so it is a field with potential.

For future researches, several hypotheses can be developed, and studies conducted.

*Cluster 2 – corporate governance* is also formed by a total of 9 words. Part of this cluster are the following: risk, quality, information, incentives, failure, earnings management, disclosure, and board. In this case, corporate governance is the word with the highest frequency, so it gives the name of the cluster. From the total of 38 words shown (included corporate governance) in the map, it has links with 37, so with all the words.

In this case, in the selected sample this word occurs in relationship with the terms: bankruptcy, firm performance, ethics, risk, quality, strategy, failure, law etc. With some words the relationship is strong, with the others weak.

Here it was also interesting to observe the links, which were not that strong, or the dots not that big. For this, we could observe that corporate governance correlated with bankruptcy, financial distress, ethics, corporate social-responsibility, earnings management had a few publications. Investigating more on the concept of corporate governance with these words could set the ground for future research questions. Further studies can be developed and cover the gaps in the literature.

*Cluster 3- ownership* is formed by 9 words. Ownership is the one who has the highest frequency for this group of words.

Ownership was placed in the selected literature in relationship with 36 words, except crisis. So, no articles were written in correlation with ownership – crisis. The least approached themes were between ownership and: policy, ethics, corporate social-responsibility, quality, board and strategy.

The second most frequent word from this cluster is *directors*. It was correlated with 35 words, from the total of 38. No articles were written in correlation with directors - policy and/or corporate social-responsibility.

*Cluster 4 - governance* has in its composition 8 words. Governance is linked with all the words from the map. This was expected to happen since it is the same for cluster 2 (corporate governance).

The words included in this cluster are sustainability, strategy, management, firm, ethics, corporate social responsibility, and corporate social-responsibility

In *cluster 5 – bankruptcy* we have only 3 words: bankruptcy, board composition and financial distress. Bankruptcy is the one who has the most occurrences, so it gives the name of the cluster.

In this cluster, all the words were represented by small dots. So, in the context of corporate governance and failure (according to the initial search) not that many articles were written.

Conducting this research, helped us to identify the most common associations between topics, but also the least approached. It helped us to outline potential research directions, due to the results obtained.

### 3. Conclusions

In the current literature, based on the selected sample, the most frequent articles were written on the topic of corporate governance, performance, ownership, management, directors, and failure. These topics have a lot of links among them, correlated with diverse themes such as: ethics, corporate social-responsibility, quality, earnings management and so on.

Some of the links were not that strong, meaning that not that many articles in a certain area were published. It is important to observe and conduct a research for it is an area with potential, and a gap can be found and covered by conducting different studies. For example, bankruptcy is directly linked with board composition as the Vosviewer map shows, yet the occurrence is not that high, meaning that in this area is a high potential on writing articles.

So, the bibliometric review, obtained by using the Vosviewer program, underlines the necessity and the potential on developing several studies on different topics regarding corporate governance and failure.

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*Web of Science*

## **BIBLIOMETRIC ANALYSIS ON EARNING MANAGEMENT**

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**Abstract:** *This paper refers to the bibliometric analysis of existing studies on earnings management, indexed by the Web Of Science, databases, 50 articles selected on the basis of limitations were analyzed, as follows: published from 1900 to the present, keywords of the articles, citations and impact factor of the journals in which they were published. Bibliometric methods can be found in all scientific fields. VOSviewer - a software tool for building and visualizing bibliometric networks. Scientific maps have been used to show co-authors in the field of earning management, cooperation of the country and the university in earning research and "Earning management". Current bibliometric analysis has indicated that earnings management is by no means a new topic. The results of the bibliometric analysis provide tools in the evaluation of researchers, institutions, as well as indicators of the evaluation of the quality of scientific journals. We focused our attention on the use of the results.*

**Keywords:** *bibliometric analysis; earning management; financial situations; scientific maps*

**JEL classification:** *F65*

### **1. Introduction**

Concerns about earning management have been of interest for academics since the 1900s. However, it can be said that this issue is not yet fully known. Earnings management was reviewed mainly by foreign authors, who dealt with the reasons or patterns of its detection. Ball (1972), Kaplan & Roll (1972), states that the investor focuses on the reported numbers, which means that the investors assume the increase of the share prices as a result of the higher reported gains. It can also be argued that earnings management could be misleading for investors who consider the amount of earnings reported on the basis of the financial statement as the only source of corporate information (Rath & Sun, 2008). The results of the initial studies dealing with the issue of earnings management were inconclusive. Further studies have led to a shift from the capital market to the non-capital market.

### **2. Brief review of the literature**

Watts and Zimmerman published the theory of accounting in 1978, during the same period they dealt with the main reasons for earning management. Based on research, at the level of large entities there is a higher risk of interference in reported earning management by investing in assets that are considered to have a lower risk to avoid increasing earnings, thus reducing political costs. In addition,

earnings are managed to avoid losing contracts and to improve management bonus plans. The influence of contractual results for the interests of managers presupposes a positive accounting theory and the manager's effort to choose the appropriate accounting policy. With the 1990s, the interest in these practices shifted from the non-capital market to the capital market. As mentioned above, earnings management plays an important role in the reliability of profit and loss statements. Earnings management initiatives directly affect the stock markets, creditors, investors and banks or many financial institutions (Suprianto et al., (2019); Vrbka et al., (2019). For instance, the investors use earning management in order to get as high as possible profits to increase their dividends (Achim and Borlea, 2020, p.195). The purpose of bibliometric analysis is extremely important because it is a method of measuring and monitoring scientific results.

Earnings reflect the success of a business, being defined as a positive difference in income minus expenses or an increase in the owner's capital in economic activity. The value of the understanding for the owner is directly affected by it. There are several definitions of earnings management, especially depending on the positive or negative understanding of the concept by the authors. Copeland (1968) defined that by offsetting year-on-year fluctuations in profits, moving from the most successful periods, when profits are higher, to less successful periods, where profits are the lowest to reduce the negative consequences caused by these fluctuations. Lev (1989) defined earnings management as a method of manipulating financial statements, the purpose of which is to improve the company's financial situation.

### 3. Bibliometrics analysis

The contribution is the literature review and bibliometric analysis, in this part we will not turn our attention to the description of bibliometric methods and results based on bibliometric analysis. "hidden" relationships between disciplines, authors. Bibliometric analysis deals with the quantitative aspects of information. The source of information for this research is the Web of Science, they provide data as well as analytical tools for their bibliometric analysis. The database size of the bibliometric analysis can be found in table 1.

**Table 1:** Database size

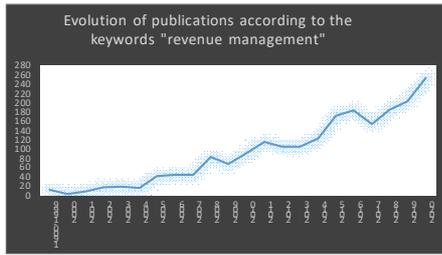
The keywords after which the search was performed	Earnings management
Period of time	1900 – 2020
Source of information	Web of Science

Source: own processing

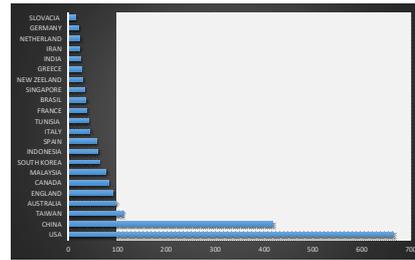
### 4. Results

In the first stage our contribution focuses on descriptive statistics. The results being used in bibliometric analysis and are presented in Figures 1-3. Starting with the total records for "earnings management" returned after searches in the Web Of Science database in the period 1900-2020. We can see an increased interest over the years in earning management. There can be a significant increase in interest in

this topic, especially after 2000, the most intensely studied this topic is in 2020, we believe that this is the influence of the current pandemic.



**Figure 1:** Evolution of publications over the years  
Source: Web of Science's own database processing



**Figure 2:** Frequency of "earning management" publications in certain countries  
Source: Web of Science's own database processing

Figure 2 shows the frequency of publication of "earnings management" in selected countries from 1900 to the present. Only countries with a frequency of more than 15 records are displayed. The US has the highest frequency of items dealing with earning management.



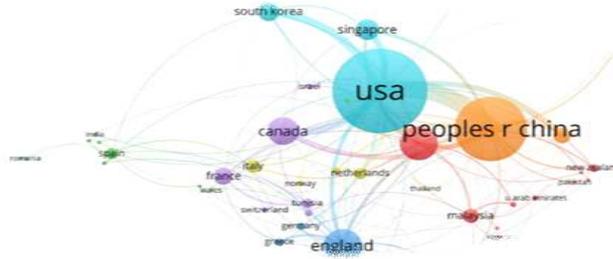
**Figure 3:** "Earnings management" in different fields of science  
Source: Web of Science's own database processing

Based on Figure 3, it can be stated that the issue of earning management is a multidisciplinary topic. The second part of the bibliometric analysis is based on the use of a method based on the creation of scientific maps.



**Figure 4:** Scientific map of publications with the term "earning management"  
Source: Web of Science's own database processing

Figure 4 is a view of the network (clusters) of keyword publications on earning management. The author analyzes keywords to obtain information about factors related to the issue of earning management. The size of the circle represents the weight. The larger the circle, the heavier it is.



**Figure 5:** Map with the origin of "earning management" publications  
Source: Web of Science's own database processing

Figure 5 represents the origin of publications dealing with the issue of earning management. The analysis shows that in the scientific community the most cited publications on earning management are from the USA, China, Australia, England, Canada and so on. The links between the circles also represent cooperation between countries in research.

### 5.Conclusion

The bibliometric analysis performed has several advantages. Through scientific maps, authors can have benchmarks related to research developments, to words that are similar to their keywords. With the help of this bibliometric analysis, economic problems are solved at an interdisciplinary level, bringing a different point of view to our research. It is possible to identify the research areas in the field. Research on this topic from the past to the present has registered significant increases. An upward trend can be observed in terms of earnings management. As a limitation of our research, we can mention the fact that only a small number of bibliographic materials were analyzed according to the results obtained by the search performed on the Web of Science platform. Thus, a significant part of the relevant research literature as well as other contributions in this field are not included.

We believe that the results of this research could have significant implications for scientists, university professors and students, as they reveal the research gap in this field, which indicates areas that could be researched in the future.

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## THE IMPACT OF THE BUSINESS ENVIRONMENT UPON THE SMEs

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**Abstract:** *The theme of this article was chosen because it is very important to be able to determine the way in which certain factors might influence the performance of a firm. The impact that the business environment in Romania and the EU have upon the SMEs in our country represents an area of high interest. The new role of the state in the economy and society has led to the reconsiderations of some concepts, such as cost effectiveness, price efficiency, risk and even business failure, that cannot be measured at a macroeconomic level and then at a firm level, but the other way around. Under these circumstances the firm becomes the core cell of the economy, that is influenced by all of the market specific factors such as uncertainty and risk. The fundamental problem of the existence, operation and development of the firms under the complex conditions of the market economy is the unfolding of an efficient and profitable activity. The reasoning of this research is based on the need to respond to these issues, that most SMEs in Romania confront themselves nowadays. Managers are forced to find solutions to relaunch their businesses.*

**Keywords:** *SMEs; business environment; free market economy; emerging market economy; firm performance.*

**JEL classification:** E61; E62; D25.

### 1. Introduction

Nowadays, risk and uncertainty are phenomena with a strong impact on profitability in the present market conditions. Analysing carefully most findings on the issues of efficiency, it is arguable that most specialists consider efficiency to be a complex concept, when it comes to a certain economic mechanism and its components being influenced by a multitude of factors of either an economic, political or social nature. The enterprise can also be considered to be a technical or material system, because there are certain connections between the means of work, the raw materials and the materials used, that manifest themselves through the technological dependence between the subdivisions.

Obviously, the divisions where the production activities are carried out have the highest priority. The enterprise is mostly a predominantly operational system and most of the time, the work processes carried out within it have an economical character (Rădulescu, 2004).

## 2. General aspects of the SMEs in the EU

There have been many approaches, which most started from partially different concepts with regard to the size of the firm and the ways of expression and quantification. A great example would be the study conducted by the Institute of Technology in Georgia, Atlanta, and that was taken over by the World Bank about 40 years ago. The study conducted an analysis of 75 countries and achieved a synopsis of 50 definitions of SMEs (World Bank, 1978). In the various tries to define the economic efficiency of a business, the following hypothesis should be considered: "a business is effective when making profit". This means that restricting the definition to the effect/effort ratio is a narrow approach, "a business is effective when the long-term profit growth rate tends to rise" (Băileşteanu, 1998: 444-447). In these circumstances, efficiency must be defined and measured in relation to time. An important component of the economic policy is the financial policy that is "anchored in the development process of any society" (Onofrei, 2000: 11). The realization of a financial policy and the organization and management of a financial activity, imply a bit more than just "the elaboration of the management strategy and a direct practical activity" (Tulai, 2003: 92)

With regard to the manifestation of the financial policy, there were various meanings and interpretations regarding its sphere and the formulation of its objectives. Stiglitz and Walsh emphasized the fiscal policy and the governments' attitude in this field, banks' attitude towards credit and the monetary policy, and so on (Stiglitz & Walsh, 2005). There were also quite interesting opinions on the components of the financial policy, expressed by the authors of the Economic Sciences Dictionary, focusing on the budgetary component and insisting on governmental budgetary attitudes (Jeussua, Labrousse, Vitry & Gaumont, 2006). From the research of the financial policy at a microeconomic level, we discover the main directions of its manifestation, namely: the selection of the investment projects, identifying funding arrangements, choice of the distribution of dividends, respectively of the net profit, selecting optimal solutions to change the amount of equity and ensuring an optimal ratio between debt and equity (Halpern, P., Weston, J. F. & Brigham, 1998).

Furthermore, when it comes to the economic profit versus the accounting or financial profit, the authors mentioned above, once distinguishing between economic and accounting costs, could easily distinguish between economic and accounting profit as well. If we were to calculate these two profits, the accounting profit would be obtained by subtracting the sales revenue from the accounting cost, and the economic profit would be obtained by subtracting the same sales revenue, from the economic costs.

Most of the times, in any type of market there can be some vertical boundaries for the firm to overcome. The production of any good or service usually requires a range of activities that are organized in a vertical chain, flowing from upstream suppliers to downstream manufacturers, distributors and retailers. It is well known nowadays and proven that a vertically integrated firm can produce an input at cost and therefore have a much higher competitive advantage than a non-integrated firm, that must purchase inputs at the market prices (Besanko, Dranove, Dhanley & Schaefer, 2010).

### 3. The SME sector in a European context

With regard to the legal approach of the market power, the cornerstone of the European Law on the abuse of market power is the Article number 82, of the European Commission Treaty, written below:

"Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States. Such abuse may, in particular, consist in:

- directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
  - limiting production, markets or technical development to the prejudice of consumers;
  - applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive advantage;
  - making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts."
- (European Commission Treaty, Article 82).

As it appears, there is a prohibition of dominance covered by the European law, that covers a wide and diverse range of corporate behaviour. This article applies only to firms that have a dominant position. Of course, there is also a wide variety of case law that deals with the assessment of this dominance concept, that usually assesses the market entry conditions, the market definition and even the market shares of the company, if there is such a case (Vickers, 2008).

When it comes to a firms' competitive advantage in the market it operates into, it can be said that the firm has a competitive advantage over its competitors, when it earns a higher rate of economic profit than the average economic profit of its competitors. On the other hand, when competitive firms are in a perfect competition, no such sort of competitive advantage would ever be sustainable because the persistence of profitability over time would be weak and most of the firms' profits would converge to the competitive level.

In the national and international literature, there are numerous definitions of the concept of economic strategy, some of which are broader, some more narrow, which highlight different characteristics of the strategy, depending on the aim pursued by its approach (Niculescu, 1998). The economic strategy is clearly defined by Ansoff in the wider context of the strategic management approach of the firm's business (Ansoff & Antonoiu, 2005). In Ansoff's acceptance, the economic strategy of the firm is gathered in a set of decision-making criteria and rules that guides the company's behaviour throughout the strategic period, a concept appropriated in our theory and financial practice by most management specialists (Burduş, 2005).

In the same context, it is analysed how uncertainty and risk are manifested as the coordinates of the substantiation of the financial objectives. The uncertainty of the processes and economic and financial phenomena at the company level is also accentuated by the manifestation of uncertainty and risk at a macroeconomic level. As shown in the economic literature, the state of the economy at macro level is under major influences driven by social risk, political risk, inflation, recession, unemployment, sectoral imbalances and so on (Lynch, 2002). Their impact on the

substantiation of the financial objectives of the firms' activity is accentuated by the emergence of external risk factors such as the interest rate risk, natural risks, market risk, as well as internal risk factors such as the specific field of activity of the company, the management characteristics and organizing.

The financial analysis offers solutions in combining the company's financial activity with the exploitation activity, which leads to the increase of the profitability threshold. However, this increase implies increasing the likelihood of financial risk. The phenomenon occurs because the two activities generate fixed costs that do not depend on the amount of activity carried out and if the exploitation activity will not generate enough profit in the next years to cover these fixed costs, then the company might register losses in the long run.

#### 4. Conclusion

To conclude with, taking into consideration a firms' strategy, a company's structure reflects the ways in which it solves issues related to coordination and information flow, implied by strategic decisions. Usually, when it comes to the organizational structure, there are certain arrangements, both formal and informal ones, that need to be done, in order for the firm to divide its critical tasks, or to establish routines and information flows in order to develop better operational capabilities. When a firms' strategy is implemented or carried out, individuals working in that certain company must know about that certain strategy and its operational requirements and tasks that need to be carried out by every single one of them, in order for that certain strategy to work properly.

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## STRATEGIC CSR IN SMES FROM WESTERN ROMANIA

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**Abstract:** *In this paper we analyze the strategic approach on CSR by small and medium enterprises in Bihor and neighboring counties. We test an internationally validated scale in order to assess the interest and orientation regarding CSR by managers and entrepreneurs in this region. By doing so we fill in a gap in the Romanian literature concerning empirical studies on social responsibility by SMEs.*

**Keywords:** Corporate social responsibility, Romania, SMEs

**JEL classification:** M14.

### 1. SME sector and CSR in Romania

The Small and Medium Enterprises sector is considered the engine of economies in Europe, and Romania the like. These companies employ 67,5% of the total work force of the country and contribute to almost half of the formation of the gross added value (Radulescu, 2017). Nevertheless, the dynamic of SMEs life cycles are dependent on the macroeconomic climate and influenced by economic policies. In 2015, the percentage of SMEs in the total of registered enterprises in Romania was at the level of 99%, employing 67% of the total employees (European Commission, 2016, apud Radulescu 2017). The main challenges faced by this sector after the economic crisis are: finding new clients given the high level of competition; attracting qualified human capital; the dynamic of production costs and those related to work force; regulation costs and access to finance (Radulescu, 2017: pp 74). Along with European characterizations, the SMEs sector is seen as dynamic, competitive and flexible compared to large companies.

The impact of SMEs, both as number as well as the effect of their size (turnover and number of employees) was proven also for territorial economic growth also on Romanian development regions (Gherghina et. al. 2020).

Most Romanian studies attest the openness of companies towards social responsibility, as well as the lack of maturity of CSR or related processes (Obrad et. al. 2011; Olaru et. al. 2011; Badulescu et al., 2018; Ciuperca 2011; Baleanu et. al. 2011; Gorski, Fuciu and Croitor, 2014). According to Lungu's et al. review (2016, p. 361) based on 186 scientific papers, most research is focuses on CSR in action, followed by meaning, definitions, and models of CSR and the impact of CSR on stakeholders or the relationship between CSR and financial performance. And, there are only 7 articles that address the factors determining CSR initiatives (Lungu et al., 2016, p. 361). An analysis of the most cited Romanian papers on CSR in Clarivate, reveals a combination of theoretical and empirical approaches. The empirical papers reflect mostly the Romanian situation (Olaru et al., 2010; Bageac et al., 2011; Olaru et al., 2011; Paraschiv et al., 2012; Roman et al., 2015,

Dobre et al., 2015), yet none employ an internationally validated scale of CSR. One empirical paper relies on a comparative perspective regarding attitudes of students from Romania and France towards business ethics (Bageac et al., 2011).

Regarding the theoretical traditions, it was interesting to find that most of the papers rely on sustainability - 3 papers (Parashiv et al., 2012; Roman et al., 2015 and Dobre et al., 2015), two test a European excellence model and rely on the European framework also with an emphasis also on sustainability (Olaru et al., 2010; Olaru et al., 2011). One paper is based on social performance as a measure of social responsibility (Albu et al., 2011) and one reflects CSR as a normative concept emphasising the need of companies to react to social pressures (Zaharia and Gunday, 2011). Two papers rely on general ethical considerations (Frunza, 2011).

Measures of social responsibility as used in large companies can be adapted on smaller companies. CSR scales developed by several authors (Maigan and Ferrel 2000; Turker 2009) were also tested on small and medium enterprises (Saveanu et al 2014). Such scales reflect organizational attitudes towards different stakeholder groups, and consequently suggest a more strategic approach than the direct actions measurement. In this paper we will test the relation between social responsibility actions and the organizational attitude towards CSR scale.

## 2. Methodology

In this section we present data collected through paper and online questionnaires in 2017. The instrument was aimed at reflecting the profile of CSR activities undertaken by small and medium enterprises in the western part of Romania. There were 18 closed questions and 4 opened questions. The questions ranged from characteristics of the firms, to understanding of the role of businesses in providing social welfare, CSR domains and activities undertook by respondent SMEs, level of formalization of CSR and organizational CSR. There were 109 answers recorded with the help of MA students from University of Oradea, Faculty of Economics. The sample is opportunistic, as students collected the answers from firms with which they interact (work, family members or other connections). Consequently we acknowledge that this sample is not representative; however we consider that the results we present portrait a reality for SMEs in the region. There is one answer for each SME in the sample. Responses were given by managers or administrators of these firms. In our sample of 109 SMEs, 54% are from Oradea, 7% from other towns in Bihor County. 22.7% are from other neighboring counties. The rest are from rural areas in Bihor County. The description of the sample can be found in the Table 1 below:

**Table 1:** Description of the sample

	Mean	Median	St. dev.	Minimum	Maximum
No of employees	19,7	8	32,614	1	188
Turnover	6939196,38	521128,00	20578917,47	10	130589375
Year of funding	2005,75	2007	7,853	1991	2017

### 3. Analysis

In this paper we present the analysis of the CSR scales as a measure of the strategic approach of CSR in SMEs in Bihor county. The strategic approach and understanding of CSR were addressed through a scale for measuring CSR, translated and adapted from Turker (2009). A similar set of items were validated as CSR scale on European countries by Maigan and Ferrel (2000). The 17 dichotomous items are presented in table no. 2.

**Table 2:** Rotated component matrix

	Component			
	1	2	3	4
Our company participates in activities that aim to protect the quality of the environment.	,730	,134	,102	,076
Our company implements special programs to minimize the negative impact it has on the environment.	,693	,032	,402	,042
Our company supports non-governmental organizations that are active in problematic areas.	,783	,045	,126	,271
Our company contributes to campaigns and projects that promote the well-being of society.	,716	,077	,284	,050
Our company emphasizes the importance of its social responsibilities to society.	,658	,060	,322	,104
<i>Our company provides complete and accurate product information to its customers.</i>	,149	,801	,181	,205
<i>Customer satisfaction is very important for our company.</i>	,071	,842	,083	,162
<i>Our company always pays its taxes constantly and regularly.</i>	,030	,750	,428	,015
<i>Our company complies fully and promptly with the legal provisions.</i>	,075	,823	,319	,130
Our company supports sustainable development by taking into account future generations.	,482	,102	,675	,050
Our company makes investments to create a better life for future generations.	,399	,098	,635	,001
Our company's policies encourage employees to develop their skills and careers.	,151	,166	,694	,391
Our company encourages its employees to participate in volunteer activities.	,411	,018	,095	,612
Our company supports employees who want to gain additional training.	,115	,149	,690	,330
<i>The management of our company is mainly concerned with the needs and expectations of employees.</i>	,211	,244	,021	,782
<i>Managerial decisions related to employees are usually fair.</i>	,113	,325	,477	,613
<i>Our company respects the rights of consumers beyond the legal provisions.</i>	,066	,087	,224	,696
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				

#### 4. Conclusion

These results show a difference between the results of this scale applied to our sample and the results on other areas. Similar studies revealed the structure of CSR approached based on relevant stakeholders: employees, clients, environment and society. However in our sample there are some contradictory results: we can highlight the first component related to sustainability (both general society and environmental protection), the second component focusing on both clients and the legal requirements (society), the third related to people well-being (both future generations and employees) and the last focusing on fairness towards employees and clients beyond legal requirements.

These results should be tested on larger samples to reveal possible differences and see how Romanian managers and entrepreneurs understand and implement CSR as strategic dimension.

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## THE ABUSE OF A DOMINANT POSITION ON THE MARKET BY EXCESSIVE PRICING

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**Abstract:** The paper introduces the concept of excessive pricing within the framework of the competition policy. Charging high prices by an undertaking is a natural freedom in the context of a market economy. Still, a company that detains an important market power has a special economic and social responsibility to ensure that its conduct does not distort competition or negatively affect the consumers' welfare on that market. A company in such a position is deemed to poses a dominant position on the market. Specifically, in regard with the notion of excessive pricing, a dominant undertaking should not make use of the opportunities arising out of its special market power in such a way as to gain trading profits which it would not have benefit if there had been sufficiently competition.

**Keywords:** abuse of dominant position; competition policy; excessive prices

**JEL classification:** K21; L41

### 1. Brief introduction to the notion of abuse of dominant position within the framework of the competition policy

#### 1.1. The implementation of modern competition rules

Modern competition rules, or the antitrust rules, were established in 1890 in the United States (US) with the enactment of the Sherman Antitrust Act, named after its promoter, Senator John Sherman. Sherman Antitrust Act is referred to as *the constitution of the competition system* (Heyne, 1991, as cited in Dodescu, 2000). The law was intended to prevent the practices of monopolization and the restriction of competition by large US companies that cooperated to set prices, production levels, or market shares. Still, the Sherman Antitrust Act did not prohibit the holding of a monopoly, considering that a law intended to promote competition must allow the possibility of obtaining a monopoly as a result of higher efficiency (Dodescu, 2000).

After World War II, European antitrust rules were initially introduced in the European Coal and Steel Community Agreement in 1951. Article 65 of the agreement prohibited cartels, and article 66 established provisions for economic concentrations and for the abuse of a dominant position held by companies. Subsequently, the Treaty of Rome of 1957, or the EC Treaty, which established the European Economic Community, included these competition rules in article 85 and article 86 (Papadopoulos, 2010).

Today, article 101 and article 102 of the Treaty on the Functioning of the European Union (TFEU) establishes, at Community level, the general framework for the pursuit of economic activities in accordance with competition principles, by prohibiting certain types of agreements between undertakings and by prohibiting certain abusive practices of dominant undertakings.

Briefly, the antitrust rules prohibit two major types of business practices, namely (i) anticompetitive agreements between multiple undertakings (e.g price fixing, market sharing, bid rigging) and (ii) the abuse of a dominant position detained by a single undertaking on the market (e.g discrimination, excessive pricing).

### **1.2. Examples of abuse of dominant position in the market**

Antitrust rules prohibit abusive conduct by undertakings that have a dominant position on a particular market.

Being dominant on a market presumes that an undertaking has such an important market power that is able to commercially behave independently of the actions of the competitors. The extreme case of a dominant position is a monopoly, where the undertaking in concern faces zero competition.

To be in a dominant position is not in itself illegal and a dominant undertaking is entitled to compete on the merits as any other company. However, because of its special market power, a dominant undertaking has a special responsibility to ensure that its conduct does not distort competition on that market or on other markets. Examples of behaviour that may amount to an abuse include: (i) requiring that buyers purchase all units of a particular product only from the dominant company (exclusive purchasing), (ii) setting prices at a loss-making level (predation), (iii) refusing to supply input indispensable for competition in an ancillary market, (iv) charging excessive prices (European Union, 2013).

## **2. Assessing dominance**

The abuse of dominance antitrust rules that are laid down in the TFEU are enforced by the European Commission (Commission). At the level of each European Union Member State the competition authorities apply the national antitrust rules. Antitrust rules at the national level are congruent with those at community level.

In order for an undertaking to be in the situation of abusing a dominant position, it is necessary that a competition authority establishes that the respective company is dominant. Defining the relevant market is a technical instrument that allows competition authorities to determine the position of an undertaking on a certain market. The competitive constraints have to be analyzed, respectively the substitutability at the level of demand and supply of a certain product/service, as well as the potential competition (Wish; Bailey, 2015).

In accordance with the legal provisions in the field of competition, when assessing dominance a competition authority will define (i) the relevant product market and (ii) the relevant geographic market.

The relevant product market is made of all products/services which the consumer considers to be a substitute for each other due to their characteristics, their prices and their intended use. The relevant geographic market is an area in which the conditions of competition for a given product are homogenous.

Establishing the market shares is very useful when assessing the importance of each undertaking on the market in comparison to the others. The competition authorities' economic view and practice is that the higher the market share, and the longer the period of time over which it is held, the more likely it is to be a preliminary indication of dominance. In general, as historically data of the European jurisprudence shows, if an undertaking has a market share of less than 40%, it is unlikely to be dominant. Therefore, a market share over 40% represents a solid indicator of a potential dominant position. This indicator does not represent in itself a proof of a dominant position, subsequent analysis being needed. The competition authorities also take other factors into account in their assessment of dominance, including (i) the ease with which other undertakings can enter the market – whether there are any entry barriers on the market, (ii) the existence of countervailing buyer power, (iii) the overall size and strength of the undertaking, its resources and the extent to which it is present at several levels of the supply chain, or vertically integrated (European Union, 2013).

### 3. Excessive pricing

An excessive price is a price set by a dominant undertaking excessively above the competitive level in order to exploit its customers. The evaluation of the excessive character of the prices enforced by an undertaking in a dominant position may encounter certain difficulties in practice even if the evaluation is performed *ex post*. The main difficulty that arises is establishing an adequate benchmark (what the price might have been in a more competitive market).

One of the most relevant European case regarding excessive pricing dates from 1978 - the *United Brands case*. [United Brands Company](#) (UBC) was the main supplier of [bananas](#) in Europe, using mainly the [Chiquita](#) brand. In *United Brands* the Commission condemned UBC for charging excessive prices for Chiquita bananas in Germany, Denmark and Benelux countries. It compared the prices with those of competitors' unbranded bananas and with the price of Chiquitas in Ireland. The Commission sustained that the prices were "excessive in relation to the economic value of the product supplied". The European Court of Justice (ECJ) annulled the Commission's decision that excessive prices had been charged (Case 27/76 *United Brands v. Commission*, 1978).

The ECJ judgment in *United Brands* represents an important standard for most of the cases of excessive pricing that the competition authorities have pursued since.

According to Jones and Sufrin (2004), the Commission decision "was quashed because the Commission had failed to do its work properly. It had not presented sufficient evidence and had not analyzed UBC's costs. The Court accepted that excessive prices can constitute an abuse and that charging a price which has no relation to the 'economic value' would be excessive. But what is the economic value of a banana other than what a customer is prepared to pay for it?"

In order to answer the last question it is necessary to appeal to the text of the ECJ judgment.

In *United Brands* the ECJ used the concept of 'economic value' as following: "charging a price which is excessive because it has no reasonable relation to the economic value of the product supplied" would be an abuse when „the dominant undertaking has made use of the opportunities arising out of its dominant position

in such a way as to reap trading benefits which it would not have reaped if there had been normal and sufficiently effective competition”.

Next, the ECJ judgment specifies the criteria needed to be taken into account when assessing excessive prices: “The questions therefore to be determined are whether the difference between the costs actually incurred and the price actually charged is excessive, and, if the answer to this question is in the affirmative, whether a price has been imposed which is either unfair in itself or when compared to competing products”.

Basically, the criteria set in the United Brands case provide for a 2 steps approach to the assessment of excessive prices:

- cost vs. tariff comparison - in the situation of an excessive difference being noted the next evaluation step should be approached, respectively
- comparison of allegedly excessive tariffs with tariffs charged by other competing undertakings.

As the ECJ judgment states, other potential ways of evaluating and determining excessive tariffs are also accepted in practice: “Other ways may be devised - and economic theorists have not failed to think up several - of selecting the rules for determining whether the price of a product is unfair”.

Historically, the Commission has not dealt with numerous excessive prices cases, appearing to agree with many economists’ view that interference with high prices and profits per se is a disincentive to innovation and investment (Jones; Sufrin, 2004). The only Commission’s excessive pricing decision that has been upheld by the ECJ is British Leyland, where the Commission determined that British Leyland undertaking had charged higher prices for bestowing certificates of conformity for left-hand drive cars than for right-hand drive cars. In 1985, ECJ stated that an abuse of dominance violation occurs when the fee charged by an administrative monopoly is disproportionate to the economic value of the services rendered (Case 226/84 British Leyland v. Commission, 1985).

#### **4. Recent developments and conclusions**

The historical data shows that it is difficult to decide what constitutes an excessive price. Ascertaining what the price might have been in a more competitive market is rarely possible in practice, therefore the seek for other potential yardsticks may arise.

In the recent years, national competition authorities and the Commission vigorously restarted to analyze cases of potential excessive pricing. In May 2017, the Commission launched an investigation into excessive pricing in the pharmaceutical sector, targeting several Aspen generic oncology products. The investigation covers the entire EU with the exception of Italy, where Aspen undertaking was fined more than €5 million in 2016 for price hikes of between 250% and 1,500%, by the Italian competition authority (Global Competition Review, 2017). In July 2020, the Commission invited comments from all interested parties on commitments offered by Aspen to address the Commission’s concerns over excessive pricing. Aspen proposes to reduce its prices in Europe for six critical cancer medicines by 73% on average. Taking into account all comments received, the Commission will then take a final view as to whether the commitments sufficiently address competition concerns. At the moment of this paper the case is still in progress.

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## UNIQUE DNA FOR THE BANKING INDUSTRY – DESIGN THINKING

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**Abstract:** *More natural than analytical thinking, design thinking provides solutions to common dilemmas. Fundamentally, it is a human centered and collaborative approach. It all starts with empathy, through the help of a deep research. Furthermore, banking success resides from understanding customers, not exclusively from profits. It is necessary to figure out human thinking, the needs and desires of customers, in order to have a portfolio of appropriate products and services. This is where success comes from. Having this desideratum, the paper analyzes the characteristics of the design thinking method and the digital elements that appear in the banking sector. Certainly, the biggest challenges in the banking system are generated by the digital transformation, by emphasizing the relationship with customers and current social trends. In addition, Bank of America is an example of a successful application of the design thinking method. Through this research paper, there was analyzed the environment of the banking system which is influenced by design thinking.*

**Keywords:** banking system, design thinking, innovation, digital

**JEL classification:** G21; O10

### **1. Introduction. The new normal in innovation**

Digitalization is no longer an option for bankers, becoming a modern benchmark for financial services. Indubitably, banking must follow the direction of digitalization in order to keep up with the customer's expectations, with the changing consumer profiles, the changing generations, and the wave of technology that is taking over more and more companies and industries. Particularly, digitalization will have an impact on the way people do business and banking will not be an exception. There can already be seen a series of transformations of traditional banking, as it was decades ago, regarding its business model, developed around new digital technologies – NFC payments, online banking, alternative authentication and many more. (Larsson, Viitaoja, 2017)

On the other hand, design thinking is definitely a fashionable term today. It can be met everywhere, whether it is the corporate environment, banking employees or creative meetings. It may be stated that design thinking is the new recipe for successful products and services. Although, design thinking has been considered the secret expertise of design agencies, this process can be adopted even by those who are not experts in the field. It should be noted that, in most areas where design thinking has been remarked, it has emerged from the analysis of the cognitive processes.

Likewise, the design thinking method helps companies create added value for customers. In general, it can be used for any disturbing issue. On the other hand, the relevance of this method is observed in the banking system by developing the banking products and services that customers really need. The involvement of a group of clients, from different fields of activity, can generate relevant opinions, as the clients think from the end user perspective. There can be made an appropriate market research through their needs and desires. Therefore, the importance of researching this method in connection with the banking system comes from the desire to provide an experience as pleasant as possible for the customers, either it is online interaction or in a branch.

However, the first step towards design thinking was taken in 1950, by Buckminster Fuller. At that time, the concept of *design science* was introduced, applying the conscious design elements with the desire to help the earth's finite resources meet the needs of humanity, without disrupting its ecological processes. (Design Science Decade, 2020) In 1984, design started to be considered a strategic tool for different innovative strategies. (Kotler, Rath, 1984) Thus, design thinking is seen as a *human-centered approach to innovation*, paying attention both to the needs of the people and technology available. (Brown, 2008) In addition, design thinking is more a set of principles, not existing a clear framework for it. It can be stated that design thinking is more of a compass, than a map to follow or a creative way to solve sophisticated problems. Nowadays, design thinking is more important than ever, due to the new technologies and up-to-date business problems that have evolved and are becoming increasingly complex.

In fact, the process has five main steps, not being mandatory to follow a certain guideline:

- Empathize. This step represents the empathic understanding of the problem, through a detailed research of product or process.
- Define. Now, the information gathered in the first step is analyzed, being defined the problems observed.
- Conceive. Ideas are generated based on the knowledge gathered in the first two phases, in order to identify new solutions to the problem.
- Prototyping. In this step, the team proposes a number of product versions, as solutions to the problems identified.
- Test. There is a must to rigorously test the finished product using the best solutions identified in the prototyping phase. (Brenner, Uebernickel, Abrell, 2016)

As it turns out, there are large gaps in the literature, regarding the design thinking method applied in the banking system. However, two banks have stood out over time by successfully applying this method – Deutsche Bank and Bank of America. Accordingly, the aim of the current research paper is to discover, understand and explore the majority of opportunities generated by the adoption of design thinking in the context of banking system. It is desired to follow the positive impact, as well as the negative effects. The willingness is to obtain a clear image of the social environment and of the banks, but also to observe the use of design thinking. Based on these preconditions, the research question that underlies the current paper is – *How can design thinking improve the banking experiences?*

Furthermore, *Unique DNA for the Banking Industry – Design Thinking* contains the following subjects: an introduction that presents a generic image of the content of the paper, followed by an analysis of the banking system, which explains in detail

its profound changes that may be observed in the latest years. On the same idea, a chart indicating customer segmentation is included in order to determine the target market of the banks. The research paper begins by analyzing the current environment, as it is desired a clear connection with reality and the possibility to use design methods in a most successful way. Then, section three exemplifies the use of the design thinking method in banking. It also presents a strategy, with the desire to launch products and services that are appropriate to the customer needs and wants. Finally, the conclusions assert the basic idea of the paper, but also the findings identified during the research.

## **2. Disruption of the banking system in Romania**

Today, most bank customers prefer to keep in touch with the financial institution only through the internet. If the banks need less staff today than few years ago, it is also due to the different way in which people deal with banking services. It is generally considered that the clients will remain loyal to the banking system. Although interest rates on deposits are low, banks guarantee deposits up to a maximum amount. Banks offer long-term lending systems and thus, customers are retained, even by rescheduling debts.

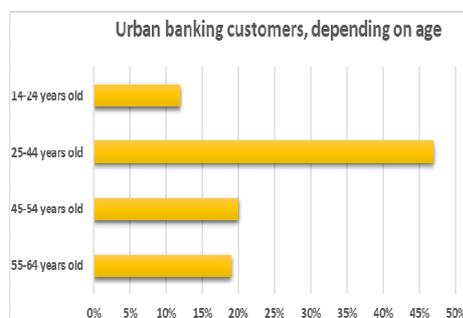
Digitalization is, however, a great challenge for banks. The main obstacles in accelerating its penetration in credit institutions is related to the relatively slow transformation of processes, starting from the tools available to bank employees, internal processes, databases, new skills and digital skills that require continuous professional training. Still, there are mixed solutions on the market, in which an operation often starts online, but ends up being completed in a traditional format, with a thick documentation. (Georgescu, 2016)

It is worth mentioning that, in recent years, three elements have been observed that led to a complete change in the banking system, namely:

- **Increased focus on customers.** It is considered that the 2008 financial crisis had unfavorable effects on customers, as they lost confidence in banks. (Gillespie, Owen, 2013) Indeed, the crisis of the banking system would not have had all the bad consequences if the banks would have been better capitalized. It is obvious that insufficient liquidity was partially at the origin of the solvency problems of specific banks. (Nagy, Benyovszki, 2013)
- **Digital transformation.** From the debit or credit card payments, to the payment with the mobile phone or with other devices through NFC technology, it has not been a long way. Additionally, 5G is known to be 100 times faster than 4G generation. Objects, devices and machines are expected to be interconnected through 5G technology. It is not only looking for interconnecting people. It is expected to develop the mobile networks in order to support the improvement of devices and services. Efficiency and costs are two defining characteristics. (Qualcomm, 2020) Along with these two breakthrough technologies, it is a must to mention the contribution of artificial intelligence, big data, machine learning and analytics.
- **The changing nature of the customer's requirements depending on social trends.** This fact may be felt more intense among Millennials. If in the past the only aim was to open a basic current account, now customers

are looking for additional benefits – SMS alerts, access to online banking or the possibility to withdraw cash from any ATM, worldwide for free.

In Romania, as it can be seen in the graph bellow, most bank customers are coming from the 25-44 age group. They bring significant benefits to banks, as most are employees or own companies. Therefore, they make numerous transactions, through the credit or debit card or through other digital means. At the same time, the clients want the banking employees to behave friendly, receiving transparent information about the bank's products and services. Although a large part of the banking activity moves online, it is still advisable for all the interactions to be transparent.



**Figure 1:** Urban banking customers, depending on age

Source: Author's sketching based on BRAT (2018), SNA – Focus, and Forbes Romania (2018), *Profilul clienților băncilor comerciale din România (studiu)*, <https://www.forbes.ro/profilul-clienților-băncilor-comerciale-din-romania-studiu-107989> [04 Nov 2020]

However, the current economic and health situation, along with the multitude of restrictions, have led to a profound change in the entire system. Financial-banking institutions, like many other companies from different sectors, turned to technology in order to continue their activities, despite the restrictions imposed by COVID-19 pandemic. Anyhow, digitalization is the future of the banking industry, as consumers will choose to work with banks that can provide remote services.

### **3.How can design thinking be successfully applied in the banking system?**

#### **The role of design thinking**

Digital transformation is a vast concept and often partially implemented because it is interpreted differently. A successful approach is one that begins with understanding what current and potential customers want. This involves designing with customers the experience that the bank wants to offer. Without a clearly defined roadmap, banks risk allocating insufficient budgets, offering few resources for implementation or even delaying the fulfillment of certain activities. Thus, the design thinking method is intended to be applied to the entire customer experience – from compliance and acquisition, to awareness and assistance, followed by an analytical overview that further amplifies positive experiences and indicates less strong points. The advantages of the newcomers are flexibility, creativity and quickness. Therefore, banks that already exist on the market must focus on innovation.

An outstanding example that brings to the fore both a bank and the design thinking method comes from the Bank of America. In 2004, this bank set a goal to increase the number of active customers, with current accounts open. Thus, the bank asked IDEO for help, with the desire to establish a strategic plan to achieve the objective. The company started to observe and question the behavior of the customers. However, through a certain interaction with a client, it was observed that he would round up the amounts by adding, when calculating his expenses, at the end of the month. Two advantages may be pointed out – an easier calculation and the few cents left over added up and became a few dollars. Due to the fact that this practice was common for many customers, Bank of America developed a service that rounded the amounts of the products bought with the debit or credit cards. The cents left after the rounding went automatically to a savings account. Thus, it is not important the amount saved, but the idea of saving. (Bank of America, 2020)

Therefore, the design thinking process is, as it turns out, time consuming and, although it works with people of all ages and backgrounds, it is easier to put it into practice in a coordinated environment. Despite these limitations, the process is valuable, developing the creativity and ability of participants, but also the discovery of products and services that can give favorable outcomes.

In fact, it is of outmost importance to put oneself in the customer's shoes and evaluate the reality from the end user angle. Once the particular behavior of the clients is observed, discovered and understood, the bank may tailor its business model in accordance with the demand. In this way, a competitive advantage may be strongly built.



**Figure 2:** Three relevant elements for the application of the design thinking method in the banking system

Source: Author's sketching

Applying the theoretical elements, there can be stated the three elements of the process in which design thinking is used in banks. Firstly, to find out who are the customers, it is a must to understand the business. A realistic look at the business is needed and understanding the key elements of the company is a first step in this direction. On the other hand, understanding refers also to the customers. It is necessary to know what kind of customers would be willing to work with the bank. Besides, their income, education or age may be influential. The more a bank focuses on serving its customers and meeting their expectations, the more successful will be. Thus, a clearer picture of the needs and desires of customers can be made by choosing a group of people from the target market to work on applying the design thinking method.

Moreover, the financial resources are established and calculated after using the design thinking method, because the correct allocation of money is required. First of all, short, medium and long-term goals must be set, Thus, these objectives should reflect the new products and services to be launched following the ideas

from the customers. Knowing exactly the strategy, the allocation of budgets is more accurate. Finally, a critical look of the new product or service can be obtained by analyzing the income and expenses. Also, customer feedback is constructive and may help understand consumer behavior. Additionally, the brand and the image of the bank can be outlined by knowing the clients and figuring out the real purposes.

#### **4. Conclusion**

Design thinking seems to be the key to success, as, first of all, it brings humans to the core. Neither technology, nor profit is the crucial element that may conduct a bank to accomplishment. Design thinking invites people to be collaborative, to build on the ideas of others, to think out of the box and to work in a team of people with different perspectives.

Therefore, emerging technologies seek to automate various financial processes, leading to the launch of cost-effective banking products and services. Thus, the aim is to overcome information asymmetries, representing an essential part of banking, seen as a business. A digital economy is gradually being built, step by step, over time. However, the bank being one of the emblematic institutions of the financial system, has a decisive function for the digitalization process. In essence, banks are using technology to do what they were already doing, but better. Although years ago, customers had only the opportunity to view only the balance of the account in the online format, now the variety of transactions is increased. It is just about imagination and the involvement of design thinking in everyday activity.

Indeed, it is a precondition to mention the concepts of User Experience (UX) and User Interface (UI), being important elements of web design. The aim is to improve the experience that a user has with a specific bank. Additionally, UX seeks to increase customer satisfaction through analytical thinking, attention to detail, empathy and simplification of the processes that a customer must go through. It is intended to be all intuitive, without the need to read a user manual. Besides, UI refers to the particular characteristics of a display system, which integrates graphic elements.

Furthermore, it is desirable for the banking system to involve as much design thinking in banking activity in order to innovate. Customers are also encouraged to be part of the decision-making process, finding out what are their real needs and expectations. Forthcoming, design thinking will bring competitive advantage to banks that decide to use it.

In the end, it is advisable to make a more comprehensive analysis of the impact of design thinking on the performance of the banking industry. Moreover, it is recommended to discuss the issue with international specialists.

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# INNOVATIVE ENTERPRISES - COMPARATIVE ANALYSIS SERBIA AND ROMANIA

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**Abstract:** *The ability of innovative enterprises to adapt to the needs of contemporary society is primordial to the well-being of the population. Workers capable of innovation are becoming more and more sought after on the labor markets, being the pillars of the innovative ensemble in national enterprises. In this article we have made a comparative analysis of existing innovative enterprises in Serbia and Romania during the years 2010-2016. The research is based on the observation and analysis of data provided by the statistical offices of both countries. The importance of this analysis is given by establishing the existing discrepancies and similarities between innovative companies in Serbia and Romania, as well as identifying the existing deficiencies in carrying out these activities.*

**Keywords:** innovation, enterprises, Serbia, Romania

**JEL classification:** O14, O31, O32

## **1. Introduction**

Although there have been numerous attempts to define the term innovation and the factors that influence it, research continues for a better understanding of this concept. According to Oxford Business English Dictionary (2005), innovation is the ability to develop things and processes that have a certain degree of novelty. Another definition attributed to innovation is „the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations” (OECD, 2005). Robert Stackowiak (2019) defines four types of entrepreneurial culture that influence the way enterprises operate: the culture that focuses on the production process, the collaborative culture, the culture oriented towards finding solutions and the culture that seeks to produce innovation. John Hopkins (2013) brings into question the major difference between innovation and creativity. The first allows repeatability in terms of novelty, making it accessible following the path of the author of the innovation. While, creativity does not offer the same permissibility to repeat, not even to the author of the original work. According to the same author, a creative process offers the possibility of innovation, but the chances of innovation influencing creativity are lower. However, in the absence of progress in innovative activities, society would stagnate, preventing economic growth and development. Innovative enterprises are an important source for innovation. The changes that characterize contemporary society emphasize the perishability of environmental resources, the ability to

develop new sources of renewable energy to support daily life, low living standards and lack of funds to support innovations at full capacity. That is why the importance of people capable of innovation has become stringent. They acquired the power they once had, those who had physical capital.

## 2. Comparative analysis of innovative enterprises

According to the National Institute of Statistics of Romania (2018), innovative enterprises are those entities that have focused on developing products characterized by novelty and improvement. The element of innovation also appears in the production, organizational and advertising process. "The term covers all types of innovators, product innovators, process, organizational methods or marketing methods, as well as enterprises with unfinished innovations or abandoned and refers to active enterprises" (National Institute of Statistics, Romania, 2018). Numerous studies conducted in transition countries show that process and product innovation, combined with other factors such as: exports, investment in human capital of workers through various training programs support the development of small and medium enterprises (Chit, 2018) (Veugelers R., Schweiger H., 2016) (Boermans M.A., Roelfsema H., 2015), but also how political power in autocratic regimes can undermine the implementation of innovative activities (Wegner, 2019). In Serbia, the criteria for hiring innovative enterprises are similar to those in Romania. The undertaken research was carried out by observing and analyzing the data provided by the National Statistics Offices of both countries. Innovation reports are drawn up every two years, as can be seen in the tables. According to statistics from 2010-2018, the total number of innovative enterprises in Serbia has been growing, highlighting the importance given to the innovative sector in the economy as a whole. In the period 2010-2012, the gap between small and large enterprises was 3347 enterprises, in favor of small ones. Although the number of large enterprises was considerably lower than that of small enterprises, the share of innovative activities was 66.2% in those large enterprises, compared to 40.8% in small enterprises. Also, manufacturing and service enterprises recorded relatively large shares of innovative activities, of 48.7% and 42.4%, respectively (Statistical Office of the Republic of Serbia, 2013).

**Table 1:** Enterprises by innovations, activities and size classes, 2010-2018, Serbia

	<b>Innovators</b>			
	<b>2010-2012</b>	<b>2012-2014</b>	<b>2014-2016</b>	<b>2016-2018</b>
Total	5280	6739	6994	9546
Small enterprises	3691	5182	5417	7566
Medium enterprises	1245	1187	1228	1573
Large enterprises	344	370	349	407
Manufacturing enterprises	2007	1977	2232	2854
Service enterprises	3273	4762	4762	6692

Source: Statistical Office of the Republic of Serbia (2010-2019)

In Table 1, we can see that the number of innovative enterprises in Serbia reached 9546 in the period 2016-2018. Again, despite the small number of large entities, the participation of these innovative enterprises was 69,10%, compared to 47.65% of small enterprises. The share of innovative activities carried out by enterprises in

the manufacturing and industrial sectors was 56.64% and 47.90%, respectively. Throughout the period under review, the Beogradski region has established itself with a majority of innovative products and services, as well as in process innovations. The turnover structure, obtained by innovative enterprises in 2016-2018, was 86.3% from products without changes or moderately changed, 3.6% from products and services on the market for the first time and 10.1% from products and services that have a novelty character in the enterprise. This pattern can be observed throughout the analysis period. We believe that openness to foreign markets should be encouraged, in order to attract funds by selling larger quantities of innovative products, as well as large investments in the advertising of national culture and products. A survey conducted during the years 2012-2014, in 3587 enterprises of different sizes in Serbia, reveals that the biggest obstacles perceived by companies in carrying out innovative activities are: lack of proper financial resources, difficulties in obtaining state rewards for innovation, in the form of grants or donations, difficulties in accessing loans from banks or attracting private capital (Statistical Office of the Republic of Serbia, 2010-2019).

Tables 1 and 2 illustrate that during the years 2010-2012, 5280 innovative enterprises were registered in Serbia, and 5968 carried out innovation activities in Romania. The following years, 2012-2014, in Serbia the trend continues to increase, but in Romania there is a drastic reduction in the number of innovative enterprises, from 5968, as they were registered in the previous period, to 3645 entities (Statistical Office of the Republic of Serbia, 2010-2019) (National Institute of Statistics, Romania, 2018).

**Table 2:** Enterprises by innovations, activities and size classes, 2010-2016, Romania

	<b>Innovators</b>		
	<b>2010-2012</b>	<b>2012-2014</b>	<b>2014-2016</b>
Total	5968	3645	2925
Small enterprises	4089	2527	2059
Medium enterprises	1400	786	643
Large enterprises	479	332	223
Industry	3415	1843	1493
Service enterprises	2553	1802	1432

Source: National Institute of Statistics, Romania (2018)

Unlike Serbia, where the manufacturing sector has the majority taking into account the criterion of the number of innovative enterprises, in Romania, the industrial sector has the majority. However, in Romania, during the years 2014-2016, the trend is decreasing reaching 2925 (Statistical Office of the Republic of Serbia, 2010-2019) (National Institute of Statistics, Romania, 2018).

We consider that the differences observed between the two countries are determined by the national specificity, but also by the financial resources they benefit from. In Romania, the industrial sector has been encouraged since the communist period, continuing to be developed in the next period. This sector has undergone a number of changes, caused by the privatization process of publicly owned enterprises. In terms of financial resources, in Serbia, the period 2010-2016, the gross domestic product per capita was between 420659 RSD (EUR

4082) registered in 2010 and RSD 640558 (EUR 5203) at the end of the period considered, in 2016. We observe a significant increase in gross domestic product per capita in the Republic of Serbia (Statistical Office of the Republic of Serbia, 2010-2019). In Romania, the gross domestic product per capita was 26368.7 lei (6154 EUR), in 2010 and 38690.7 lei (8520 EUR). In parentheses, the gross domestic products expressed in euro are determined at the exchange rate of the periods mentioned (National Institute of Statistics, Romania, 2015-2017).

On the Romanian territory, the number of small enterprises was 4089, during the years 2010-2012, registering a decrease in the period 2012-2014, the gap being 1562. The following years, 2014-2016, there is another decrease, up to the value of 2059 innovative enterprises. The same trend is followed by medium-sized and large enterprises (National Institute of Statistics, Romania, 2018). In the period 2014-2016, the total share of enterprises carrying out innovation activities registered a decreasing trend by 2.6%. Most innovations are registered in the information services sector, 25.1% and in the pharmaceutical sector 24, 2%(National Institute of Statistics, Romania, 2018). Unlike Serbia, where the administrative and manufacturing sectors occupy the majority share of 32.2% and 29.3%, respectively, in the same period (Statistical Office of the Republic of Serbia, 2017). The situation of innovative enterprises in Romania, during the years 2016-2018, was not subject to analysis due to lack of data. The Beogradski region is the center of innovation in Serbia.

### 3. Conclusion

Innovative enterprises are an important pillar of economic development, implicitly of scientific and technological progress. Following the analysis of innovative enterprises in Serbia and Romania, several conclusions can be drawn. In both countries, there is a need for greater openness to foreign trade in innovative goods and services, which can add to foreign markets and at the same time fund new investments. Trade between the two countries can also be intensified, given the advantage of territorial proximity. Innovative companies must seek, in addition to reducing costs, exchanging experience and equipping workers with the necessary skills to enable them to undertake the innovative process.

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## SMART SCHOOL. HOW TO FACE COVID PANDEMIC19 BASED ON NEW LEARNING METHODS?

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**Abstract:** *The beginning of 2020 brought one of the heaviest threats to people: the COVID-19 pandemic. This pandemic seems to have its origins in China, but it has rapidly spread within all countries around the world, including Romania. This pandemic has put a high critical pressure on the whole society mostly on the medical systems around the world, but also on governments and public administrations that have been forced to adopt some restrictive measures to protect human resources. Due to the application of physical distances, many sectors of economic activity around the world have been adversely affected. Among these sectors highly affected by this pandemic is the education sector. People consider that COVID-19 pandemic has created one of the largest disruption and challenges for the education systems among human civilisation history, impacting both students and teachers around the world, from preschool level to college and adult education. The educational system has to quickly find alternative valuable solutions in order to continue the educational process, provided that the physical distances have to be respected.*

**Keywords:** pandemic COVID19, smart school, education platforms, learning methods

**JEL classification:** A20,

### 1. Introduction

Prior to the pandemic, the educational systems had also faced various challenges in fulfilling the educational process. It is estimated that over 250 million children have dropped out of school, and 800 million adults are illiterate (UNESCO, 2018). Moreover, it is estimated that over 50% of primary school students worldwide have problems even with basic skills such as reading skills (UIS, 2017).

By April 2020, it is estimated that more than 90% of students worldwide were affected by this pandemic, representing more than 1.5 billion students, from preschool to higher education, counted in 200 states in the world from all continents. The pandemic exacerbates pre-existing educational disparities such as diminished opportunities for many of the vulnerable children living in rural or poor areas to benefit on education services. Digital divide had been amplified.

The ability to respond to the educational diverse needs is different depending a lot on the level of social and economic development. According to UNDP data, within developed countries, about 20% of students were experiencing school dropouts, while among less developed and emergent countries, over 85% of students were facing also this situation (UNDP, 2020).

The crisis caused by *the COVID-19 pandemic* has stimulated the innovative process in the education sector. The main channels used due to these special circumstances in order to transfer information and knowledge from teachers to students are the specialised educational platforms and TV shows. The effects of an amplified diffusion of ITC (Information & Communication Technologies) have a significant impact on people and societies, including in the educational process by offering certain opportunities. There are also many risks, in the situation of states that are not yet prepared to face these challenges (Patrício, 2019). Like other authors, the European Commission supports the idea that digital technologies have a significant impact on education by developing flexible learning environments and by adapting these to the needs of an extremely mobile and dynamic society. Thus, the learning systems have to promote the development of a complex set of key skills, where students have an active role.

In this context, the teaching-learning processes have to look for a more constructive way of thinking that involves an active role for students. The interactions between students and teachers can be facilitated based on digital resources & ITC. Modern learning technologies may lead to an increase in both efficiency and effectiveness of the education process, where professors have to ensure that the use of digital technologies is adequate and supports the learning process, according also to the modern pedagogical practices. Their use have to be structured such as students would be supported to develop their determination and responsibility for an active participation, based on debating, but also on critical analysis and reflection. The use of new technologies actively supports the implementation of modern pedagogical tools (Sultan et. All, 2011).

The *e-learning* process normally includes a mixed way in which the management of the entire training process is designed and developed by improving also all the classroom activities. The object of learning used within the digital environment, includes also issues related to the creation and a constant update of certain archives. Adopting learning procedures for the digital environment has certain advantages, represented by some key expressions such as: "*just enough*", "*just in time*", "*just for you*". The learning process will be much facilitated based on the help of tools such as: set of exercises, video, an educational interactive game, audio files. We consider mostly now, due to Corona pandemic impact it is essential to take into account different and diverse characteristics of the digital learning process. The lectures have to be structured such as to contain both a solid theoretical part, followed as much as possible by a strong connection with practical issues highlighting how these theoretical approaches may be applied in reality.

## **2. Platforms for online teaching and learning**

The main objective of the online teaching and learning platforms is to facilitate the transfer of information and knowledge to students. In the teaching-learning process, technology has an important role, as the traditional so-called "*teaching time*" has decreased from 73% in 1995 to 65% in 2010 (Watts and G. Schaur, 2011), as teachers have found new ways to transmit information to students. ITC and other modern technologies have to be used in order to create and develop special learning conditions. There are certain criteria that an online educational platform has to meet for a successful implementation within the education processes.

There are relatively just few platforms that seem to be reliable and valid systems for modern digital training needs. The platforms have to be checked in advance if they can support and accept certain characteristics that come from the analysis of the internal needs of both students and teachers. They have to provide dynamic and personalized systems that are consistent with the particularity of the people who will use it. The platforms have to facilitate the modernisation and a flexible adaptation of the teaching-learning process to the digital needs. For instance printer issues affecting learning platforms include also a different educational content management compared to the traditional education systems.

In this case, educational management refers to a process that involves certain issues, from design the digital content to a proper and friendly upload of content. Some platforms contain certain tools of complexity and functionality that facilitate the further implementation steps needed in the case of online courses. Another possibility is represented by publishers less able to make changes or customizations of the platforms, and in this case the self-learning process develops from standard contents such as PowerPoint, PDF, Word documents.

There are different platforms that do not have such tools, and this focuses on their own characteristics for the installation of course packages purchased from various companies. In this case, the compatibility of the courses with the platform have to be checked, as well as their testing for tracking students using the platform. One of the ways of checking refers to the compliance with international standards. The delivery phase of the platforms is the main function for which it is used. In this phase, several characteristics have to be considered, including: the type of learning environments, the target group and user administration, student authentication and search engines.

### **3. Blogs and Social Media Platforms**

Both blogs and media platforms allow registered users to write messages, to comment on certain posts of other users, to read, to send to others known information and knowledge-based content posted. For the most part, these platforms are accessible for free on smartphones, computers or tablets. They can be customized according to everyone's preferences.

Blogs can be used in the teaching-learning process (Ferdig & Trammell, 2004). They can be implemented without applying a set of commonly accepted principles for its use as a learning tool.

Social networks can have a high potential in the educational context, and because of this, they are used constantly (Dahlstrom, 2014). *Facebook* is an example of a social network that supports the teaching and learning process, because it allows access to different groups. A study conducted on this network focused on doctoral students, who created their own groups and forum for communication, showing that their community can be developed at the level of the social network only if they are motivated to share what they have learned (Kenney et al., 2013). Another study was conducted on another social network, namely *Twitter*. A potential advantage of this network is that it may allow and facilitate the extension of the virtual class to be also a part of a larger community, contributing also to the increase the degree of students involvement as more active and responsible subjects of learning (Kassens, 2014).

#### 4. Conclusions

The shock caused by *the COVID19 pandemic* on education is unprecedented. The educational communities of professors and students acting as interconnected partners have to find in a short time different alternative solutions for the teaching-learning process.

For a high-performance more efficient and effective education system based on distance learning, careful planning and preparation steps are necessary, because students and professors need a healthy and save learning environment. The online teaching system is fairly quite new for many students and teachers.

Computer systems, respectively the boarding school and the device that connects to it (computer, smartphone, tablets) highly contribute and improve communication between teacher and students. In the last decades, these systems have entered the teaching-learning process and become more and more useful mostly during special circumstances as those of *the COVID 19 pandemic*. In this paper we just wanted to share the main ways of teaching-learning that people can apply. We are open for a constructive dialogue and for sharing experience with other people. As far as we managed to identified some studies we strongly believe that both the professional blogs and the online education platforms may have a beneficial result in the educational process.

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## PERSPECTIVES OF INNOVATION IN TOURISM

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**Abstract:** *Nowadays, tourism occupies a rather important place in the process of economic transformation, but also in promoting sustainable development. Tourism, like any other industry, has trends and innovations. Innovation is closely linked to the development of human society. The change of demography, the globalization of activities, the advances of technology, the change of social habits, but also the evolution of the demand and attitude in tourism, contribute to the birth of new important tourist trends. The need for change is what makes the concept of innovation a vital concern for tourism companies of all sizes. They must distinguish themselves from competition with successful and profitable operations in order to ensure their survival in the market. Innovations play the most important role in competitive advantage. Innovations are a defining factor in gaining a competitive advantage. This article addresses the concept of innovation, as well as new tourism services, thus representing a topical issue. Innovation in tourism should be managed through supportive political strategies, in order to achieve the most significant results for research and development. Also, creativity is needed in the development of new products, because customers are looking for valuable and unforgettable experiences.*

**Keywords:** tourism; innovation; economy; development; innovative products; creativity.

**JEL classification:** L83; O31; O32; Q55; Z32

### 1. Introduction

This study includes information on the concept of innovation, the prospects it offers and the impact it has on tourism.

Tourism itself is not a field in which innovations that have changed the course of history can be pointed out, but mostly, it is a mechanism that develops and redefines at any scale, whether it is a tourist objective, a tourist location, a region, a country and so on.

In the last decades, people's lifestyles have changed radically, with the tourism sector facing an aging, healthy population with a higher financial status that prefers more and more short-term vacations.

Tourism is considered to be one of the most promising growth areas, in addition to being an innovative industry for economic growth and job creation, it is also an effective means of building meaningful relations between states and it has long-term potential to create peace and prosperity.

A key element of a successful tourism industry is the ability to recognize and cope with changes in a wide range of behavioral, environmental and technological factors and how they interact. The next decade should see major changes in the leisure and tourism environment, reflecting consumer values change, political forces, environmental change and the explosive growth of information technology. No aspect of the industry will remain untouched, the challenge for both the private and public sector parties will involve changes to gain and maintain a competitive advantage for their organizations.

## **2. The process of innovation and creativity in tourism**

The term "innovation" has different meanings and is widely used. Innovation, in a broad sense, represents the introduction of the new, in order to achieve useful results. The concept of innovation is found in the form of several definitions like:

- Commercial or industrial application of something new, a new product, process or method of production, a new market or sources of supply, a new form of commercial business or financial organization. (Schumpeter, 1934)
- An activity oriented towards the generation, assimilation and capitalization of the research-development results in the economic and social sphere. (The Romanian Parliament, Law 324/2003).
- The global process of technological and commercial creativity, the transfer of a new idea or a new concept to the final stage of a new product, process or service activity, accepted by the market. (Oslo Manual, 2005)

Author Peter Drucker states that the existence of a new idea and obtaining useful results by applying it are the essential elements of innovation, highlighted in the above definitions. Innovation is "a change that creates a new dimension of performance".

Regarding the degree of novelty of ideas, the Oslo Manual (2005) distinguishes three types of innovation: an innovation can be new for the company, new on the market or it can be an absolute novelty.

In its current sense, the term "innovation" defines the successful implementation of a new idea. However the realization of innovation must be viewed in a broad sense, in connection with creative processes that aim to find new solutions and materialize them in various forms. Such a vision is summed up in the phrase "Research-Development-Innovation".

The phrase "Research-Development-Innovation" (RDI) presents innovation as the last sequence in the cycle of activities performed systematically to increase the amount of knowledge and their use in various fields of activity.

The term creativity refers to the ability and intellectual strength of tourism staff to find new ideas, to be inventive. In the field of tourism, these ideas can represent the design of new products, new services or new methods to have very good results for the tourist services.

The activities regarding tourism have as important elements creative thinking and imagination. Without the elements listed above, tourism would be stagnant in development and could cause an economic disaster for a tourism enterprise.

Innovation and creativity are closely linked. The concept of creativity represents the finding of new ideas, and innovation refers to the application in practice of these new ideas.

The innovative product refers to goods and services with characteristics or intentions to use that differ significantly from previous products made by the enterprise. The elements of the innovative product are: new or significantly improved technical specifications, components and materials, embedded software, friendly user or other functional features.

Companies differentiate themselves by the potential for innovation and the ability to reinvent themselves, employees being encouraged to be as creative as possible.

Regarding the enterprises that operate in the field of tourism, innovation and creativity are not organized and pre-established processes; they do not have precise stages, in most cases they are represented by the spontaneity of ideas. The emergence of innovations and the launch of new tourism products and services depends on change or the need for change to meet the real needs of consumers.

The rapid development of the information field has led to the implementation of information systems that can be considered, in the field of tourism, radical innovations and, at the same time, process innovations.

In 1841, Thomas Cook designed the first travel office which aimed to organize journeys. This achievement of Cook can be considered a radical innovation in the field of tourism and had a global impact in less than 15 years since the launch of the ideas.

However, achieving innovation in tourism involves high risks and requires a longer period of time, being exposed to imitation, but there are tourism companies that are willing to take these risks in order to have a competitive advantage over other competitors.

### **3. The importance and relevance of innovation in product development in tourism**

The travel and hospitality industry offers a wide range of services. Tourism is one of the largest global industries that is constantly improving according to tourism trends and consumer preferences. The concept of innovation is a vital concern for the companies operating in the tourism sector. They need to differentiate themselves from strong competition through successful and profitable operations.

Philia Tounta (2015), Greece's tourism ambassador, says that innovation involves "the deliberate application of information, imagination and initiative to obtain greater or different values from resources".

In tourism, external factors, such as climate change and more recently the emergence of the COVID-19 virus, influence the development of tourism which has global consequences. The appearance of the virus destabilized global tourism, which is going through an episode of decline. The current situation presents a favorable period for the elaboration of a strategy regarding the reinvention of tourism.

The new information and communication systems will be needed to collect and analyze information for the development of new types of innovations adapted to a prosperous tourism.

Under these conditions, it is possible to reach the development of new markets, saving the invested resources, and finally leading to the emergence of new entrepreneurial opportunities. IT-based innovation with the help of artificial

intelligence and forms of marketing can help reduce costs, thus increasing customer value and market share.

In this difficult period, the main innovations that can give a very high yield are the systems that take tourism to a higher level, technologies that stand out through the development of new skills, new materials, new services and new forms of organization with minimal risk factors and the results can improve the economy.

Innovations that can revive tourism and that can adapt to all forms of tourism are:

- Virtual reality (VR);
- Augmented reality (AR).

Virtual reality (VR) technology can be a real success in the future for the tourism industry because it offers a multitude of management opportunities. It includes state-of-the-art entertainment applications that combine physical elements, such as mobile chairs. Also, virtual reality can allow tourists to "visit" tourist destinations that they cannot reach physically, such as visiting archeological sites - their structures can be recreated in VR; tourists can have a unique experience without exposing themselves to the current dangers. Many other activities can be simulated using VR, such as climbing on any surfaces and other adventures or simulating sports activities, which are becoming increasingly popular, such as baseball, traditional winter sports like snowboarding or skiing or even extreme sports.

Augmented Reality (AR), the second innovation, is a combination of virtual elements with real-world experiences. For the tourism industry, this is very useful because it can show tourists information about the destination they visit through applications for smartphones with AR standard. Historical details and landmarks about museums, buildings, etc. can be provided and also menus for local restaurants. Other augmented reality (AR) applications can be represented by internet-enabled virtual maps.

Augmented reality (AR) is already pleasing to the eye, stimulating travel experiences with inventive mobile applications and virtual reality (VR) makes trips take place on a whole new level without the need for travel.

With modern devices and tools available, virtual reality and augmented reality come to the aid of tourism. Thus, tourists will benefit from an extremely useful "tool" for sightseeing tours, booking information that allows activities without language barriers, as well as superior navigation. (Figure 1)



**Figure 1:** Innovations in the tourism industry

Source: own representation

#### 4. Conclusion

In recent years, the lifestyle has changed significantly. Today's society is a modern one and constantly needs change, hence the need to relaunch services in the tourism sector, by creating new products and services, more sophisticated and more nuanced. The innovation has a key role in developing the economy and the tourism. The emergence of innovative products facilitates daily life, reduces costs and increases productivity.

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## A SHORT ANALYSIS OF EUROPEAN AND NON-EUROPEAN SHARING PLATFORMS

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**Abstract:** *This article aims to make a brief analysis of a sample of 124 European and Non-European sharing economy platforms. There was an overview of Design Aspects of a Platform and a classification of platforms referring to the year in which they appeared and we could see that most European and non-European platforms were created in 2009-2015. At the same time, it could be observed that out of the total sampled, most platforms are European and have a local range. This analysis confirmed that the design guidelines can be applied to assess existing SEPs and can guide the development or improvement of SEPs. However, sharing economy platforms are beneficial in terms of the fact that those who want to contract a service or rent a good, save money, but also time due to reliable technology and easy booking process.*

**Keywords:** sharing platforms; classification; consumers; distribution.

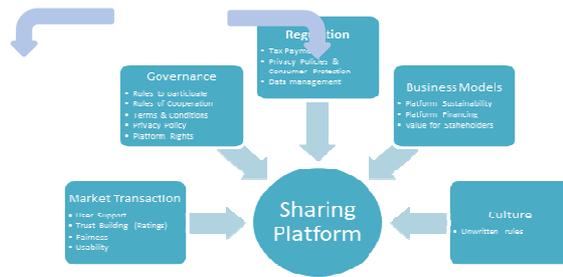
**JEL classification:** O35

### 1. Introduction

The collaborative economy has proven, in a short time, that it offers numerous advantages and benefits both at the level of individual or company, as well as benefits at the level of society and the environment. It is the positive development of this new "industry" that has led to the emergence of several sharing economy companies that create sharing platforms for almost any field of activity (Barnes and Mattsson, 2016). Whether you need a means of transportation, a place to spend your holidays, storage space, even medical advice and much more, you can find a platform that will help you at affordable prices and in a relatively short time (Frenken and Schor, 2017). The online review systems of the platforms make the transactions transparent and clear, so that it is known exactly what to expect from the chosen provider. They are particularly important in tourism industry (Badulescu et al., 2012, Badulescu et al., 2014).

The review of the literature showed that Sharing Economy Platforms are complex platforms with a multitude of functionalities, which can be designed in distinct ways. Figure 1 shows the fields of action of these platforms (Gutt and Kundisch, 2016). These refer to business models, market transactions, governance, culture.

Most of the time, sharing economy business models makes it easier for people to trade directly by connecting individuals in unprecedented ways (Caldieraro et al., 2018).



**Figure 1:** Overview of Design Aspects of a Platform  
 Source: Realised by the author, based on Fabo B. et al., 2017

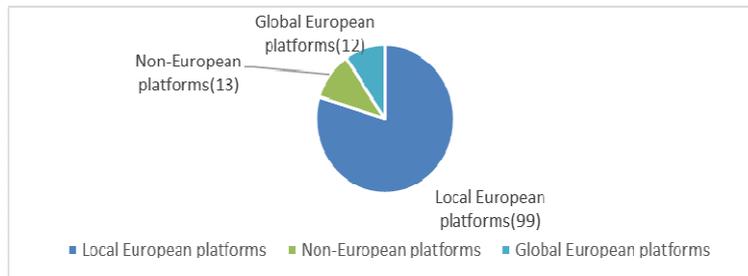
## 2. Sharing platforms

Platform businesses have emerged as a sustainable alternative to meeting certain people's needs whether we are referring to accommodation, transportation, meals or even loans or investments. The multitude of platforms and their development are evidence that the sharing economy is changing markets and consumption patterns (Zervas et al., 2017).

For this analysis, 124 sharing platforms were selected. The purpose of the sample selected is not to have a representative image of SEPs in Europe, but to capture the diversity in business models and services and to provide an overview of all sectors.

### 2.1. Territorial distribution of SEP activities

99 of the sharing economy platforms are platforms founded in Europe and operate only in the country where it was created or in a few other European countries (Figure 2). 13 of the sharing economy platforms were founded outside the European continent, but are also active on the European market. These are: 9flats, AirBnB, Eatwith, Freelancer, Gett, HomeExchange, Liquidspace, Mealsharing, Sharedesk, Spinlister and Uber. The next group of platforms, 3D Hubs, BlaBlaCar, CrowdCube, FundedByMe, Goboony, Helping, HouseTrip, KissKissbank, lendahand, TransferWise, Viedit, Wimdu, are platforms founded in Europe, but are used globally.

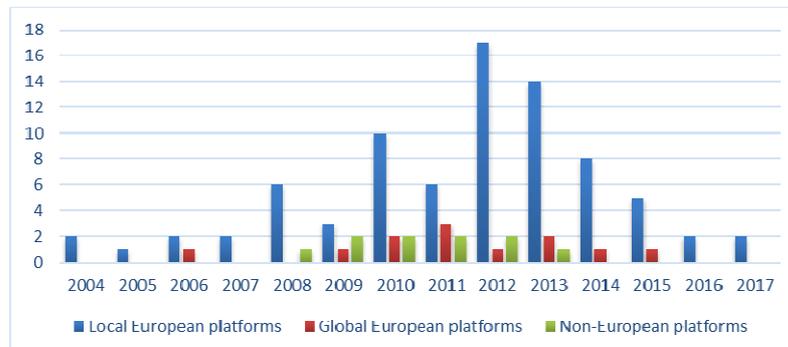


**Figure 2:** Distribution of Local European, Non-European and Global European Platforms

Source: Figure realised by the author based on data from [www.statista.com](http://www.statista.com)

## 2.2. Classification of platforms according to the year of establishment

From the sample of the 124 sharing economy platforms, data regarding the year of establishment was found only for 102 of them (Figure 3). The oldest platforms were born in 2004, and the newest ones were established in 2017. Among the first platforms that were born is the European platform BlaBlaCar, founded in 2006. The American sharing companies AirBnB and Uber were established in 2008, respectively in 2009. 57% of the platforms (out of the total of 124) appeared during a period of 5 years, starting from 2010 to 2014 inclusive. 43% of platforms were founded as local platforms in Europe. (Figure 3).



**Figure 3:** Local European, Global European and Non-European Platforms by founding year

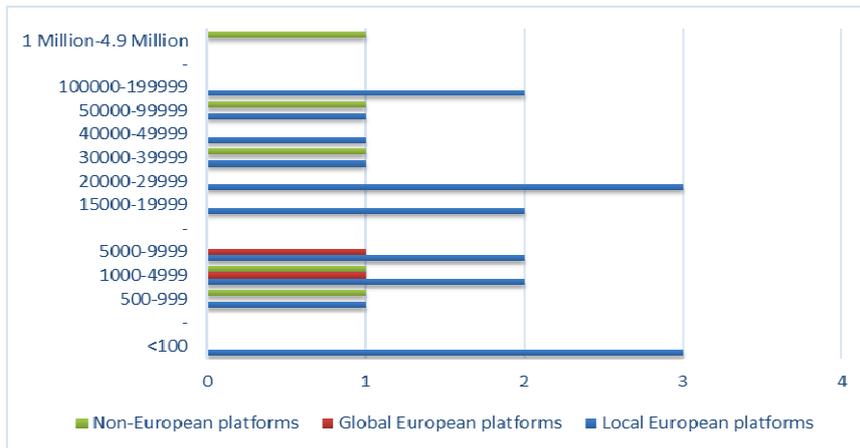
Source: Realised by the author based on data from [statista.com](http://statista.com), [airdna.co](http://airdna.co), [uber.com](http://uber.com)

Even if the sample includes four platforms that were founded in 2016 and 2017, the number of new platforms has decreased steadily since 2013. Also, there are few European platforms that are viable globally. As for Non-European platforms, there were no new founded in the last 4 years.

## 2.3. SEP classification according to the number of providers and consumers

When it comes to size in terms of the number of providers or consumers, only a handful of platforms make the exact figures public and most keep this information ambiguous or do not disclose it at all (European Commission, 2016). For 25 platforms, the number of providers is available, while the number of consumers is available for 33 platforms.

As Figure 4 shows, twelve platforms have a number of providers ranging from less than 100 to 10,000. The cluster that includes platforms with 1,000 to 4,999 providers is the largest, containing four platforms. Ten platforms have between 10,000 and 100,000 suppliers and another two between 100,000 and 200,000. A single platform has between 1 million and 5 million vendors.

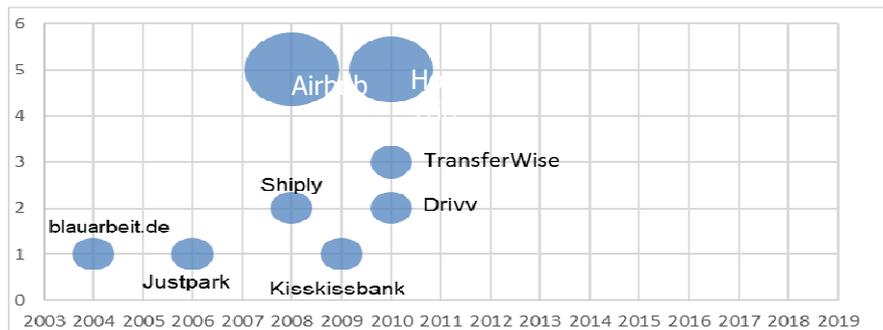


**Figure 4:** Local European, Global European and Non-European Platforms by Provider Count (25 platforms)

Source: Realised by the author based on data from [statista.com](https://www.statista.com), [airdna.co](https://airdna.co), [uber.com](https://uber.com)

Figure 5 shows the distribution of sharing economy platforms according to the year of establishment and the number of consumers. It is difficult to get statistics with 100% accuracy in terms of the number of consumers, both for large platforms (e.g. Airbnb, Uber) and for smaller platforms. For the number of consumers for larger SEPs, such as Airbnb and Uber, but also for smaller SEPs.

Thus, Figure 5 provides just an indication and illustrates that the currently largest SEP on the European market were founded in the period from 2008 to 2010.



**Figure 5:** Platforms by Consumer Count ( $\geq 1,000,000$ ) and Founding year\*

Source: Realised by the author based on data from [statista.com](https://www.statista.com), [airdna.co](https://airdna.co), [uber.com](https://uber.com)

\* off-scale: Airbnb - value shown: 5'000'000, actual value: 100'000'000

\* off-scale: HouseTrip - value shown: 5'000'000, actual value: 50'000'000

### 3. Conclusions

The sample of sharing economy platforms considered in this study is not very large, but it was selected to achieve a good distribution of SEPs by sharing categories. The findings of the analysis are only an indication.

The analysis of sharing platforms showed that the sharing economy in Europe, at least in some categories of sharing, seems to be dominated by non-European platforms that have global operations. Well-known examples of such platforms are Airbnb and Uber. There are also European platforms that are globally active, however these platforms appear to be smaller than global Non-European SEPs. The sample also contained 99 local SEPs that were founded and operate in Europe.

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## SMALL AND MEDIUM ENTERPRISES GOING DIGITALLY – A PERSPECTIVE FROM WITHIN THE COMPANIES

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**Abstract:** *Digitalization, mainly marketing digitalization, are relatively new topics on the Romanian market, but well received by the companies deciding to embrace them. The author aimed a research to determine the digitalization level and complexity for the Romanian small and medium enterprises (SMEs) in the high-tech industry. The current paper analyses specific data, part of the broad quantitative marketing research. The results present the attitudes, opinions and behaviour of the Romanian high-tech SME's representatives in respect to company's digitalization and identifies if the position held within the company influences their views and decisions. Academic researchers can use the main study and the data presented in the current paper as a background for more complex research on this area, as sample, study topics and analysis "ready-to-use" are provided. Data gathered can also serve as a starting point on building effective digital marketing plans for SMEs in need of going digitally.*

**Keywords:** Digitalization, Marketing automation, Digital growth, Small and Medium Enterprises, High-tech industry

**JEL classification:** L25; O33; Q55

### 1. Introduction

According to studies conducted by McKinsey&Company, Romania is presented as a country with a low level of digitalization but high growth potential. Alongside with Bulgaria, Croatia, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia, it forms the Digital Challengers group, being a country specialized in the software solutions development (Novak et al., 2018). Sad to relate, Romania is at the bottom of the ranking in terms of digital performance evolution, holding in 2020 the 26th place out of 27 member states of the European Union (European Commission, 2020).

In Romania, the small and medium enterprises (SMEs hereafter) generate half of the added value and up to two thirds of the jobs in the non-financial economy (Pele, 2018). However, the implementation of Industry 4.0 in Romania is still at its infancy (Türkes et al., 2019). Considerable effort is being made to transition the Romanian SMEs from Industry 2.0 to Industry 4.0. So as, the Ministry of Economy has created special funding lines to accelerate the implementation of new technologies and digital transformation of enterprises (Minister of Economy, 2018). Various studies show that the Romanian SMEs are willing to adopt digitalization, but there are certain obstacles in adopting new technologies, such as: lack of financial resources, lack of knowledge (know-how), insufficiently specialized human

resources, etc. (Gilmore, Carson, and Rocks, 2006). The purpose of the current marketing research was to determine the attitudes, opinions and behaviours of the Romanian high-tech SMEs in respect to digitalization. A quantitative research was carried out by questioning one representative from each studied company, mainly from the marketing and/or IT department.

## 2. Research methodology

The sampling framework for the current quantitative marketing research comprised the autonomous SMEs in the high-tech industry, which operate on the Romanian market. A total of 352 people was contacted via the business social network LinkedIn, the positive response rate being 73.3%.

Due to the very large geographical spread of the studied companies, the questionnaire was applied using the Computer Assisted Web Interviewing (CAWI) method. This method involved the use of the Internet to complete and distribute the questionnaire (Brownlee, 2018), so as the Forms application provided by Google was used. The questionnaire was active for a period of 11 weeks, the data collection interval being June-August 2020. It included 22 questions, out of which 18 were aimed at collecting information on the digitalization of Romanian SMEs in the high-tech industry, the last 4 being addressed for the identification of the respondents and the studied companies. The final database was firstly processed manually and then loaded in the statistical analysis program, SPSS, version 19.

## 3. Research results

For the current scientific paper, 2 out of the 22 research questions were analysed and 1 hypothesis was tested in order to give meaning to the data collected. These target the researched population attitude, behaviours and opinions on the current degree of company's digitalization and future directions.

The next section of this chapter will present and test the statistical hypothesis, while detailing the final findings of the research.

- H0: There is no difference between the type of position held by respondents and the extent to which it would bring changes in the company's current marketing policies and strategies.
- H1: There is a difference between the type of position held by respondents and the extent to which it would bring changes in the company's current marketing policies and strategies.

An ordinal scale was used to measure the degree of change that respondents would bring to the company's current marketing policies and strategies.

**Table 1:** Contingency table

The extent to which they will bring changes	Job type		Total
	Non-management	Management	
Very small extent	6.3%	4.1%	5.4%
Small extent	16.3%	18.4%	17.1%
Neutral	46.3%	24.5%	38.0%
Large extent	23.8%	42.9%	31.0%
Very large extent	7.5%	10.2%	8.5%
<b>TOTAL</b>	100.0%	100.0%	100.0%

As can be seen in Table 1, there are differences at the distribution level, people holding a non-managerial position tending to have a neutral opinion on this issue, while people in management positions being more concerned about change. To determine whether these differences are significant, the Kolmogorov-Smirnov test was applied. Taking into account the relative frequencies and the cumulative relative frequencies of the two groups, the new hypotheses tested were:

- H0: The maximum difference between the cumulative frequencies for the non-management function (F1) and for the management function (F2) is zero.
- H1: The maximum difference between the cumulative frequencies for the non-management function (F1) and for the management function (F2) is different from zero.

**Table 2:** Calculation of the differences between the cumulative relative frequencies

	F1	F2	F1-F2
Very small extent	6.3%	4.1%	2.2%
Small extent	22.6%	22.5%	0.1%
Neutral	68.9%	47%	21.9%
Large extent	92.7%	89.9%	2.8%
Very large extent	100%	100%	0%

Using the data from Table 2, the maximum difference of the cumulative relative frequencies and the theoretical value  $D\alpha$  for  $\alpha = 0.05$  were calculated.

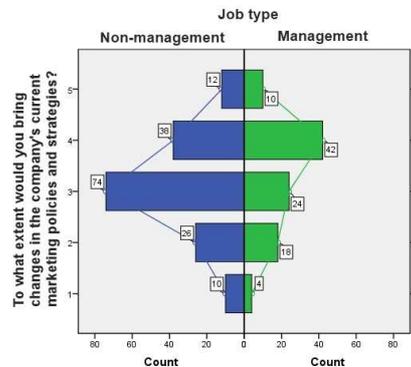
Maximum difference for cumulative relative frequencies:

$$D_{calc} = \max_k |F_1(k) - F_2(k)| = |68.9\% - 47\%| = 21.9\%$$

Theoretical value:

$$D\alpha = 136 \times \sqrt{\frac{n1+n2}{n1 \times n2}} = 136 \times \sqrt{\frac{160+98}{160 \times 98}} = 17.44\%$$

In conclusion, according to the above calculations, because  $D_{calc}$  is higher than  $D\alpha$ , the alternative hypothesis H1 is accepted. So, there is a difference between the type of position held by respondents and the extent to which it would bring changes in the company's current marketing policies and strategies.



**Figure 1:** Kolmogorov-Smirnov test results for hypothesis testing

As can be seen in Figure 1, where data was visually presented, the non-managerial functions tend to a neutral opinion, while the management agrees on change the different opinion among different job types being obvious.

#### 4. Conclusion

The overall results of the research are optimistic, showing a quite high interest of high-tech SMEs' representatives in the digitalization related topics. This can lead to an increase in the current degree of digitalization of the companies by designing explicit digital marketing plans and by allocating a specific, larger budget. The companies studied have the potential for digitalization but, according to most respondents, it is not used at full capacity and there are things that can be improved.

When it comes to decision making, employees who hold a managerial position are more willing to make changes while people with an executive position have a neutral opinion on this topic. In this regard, the analyses showed that there is a difference between the type of position held by respondents and the extent to which it would bring changes in the company's current marketing policies and strategies.

In conclusion, paying attention to the company's management needs and coming up with digitalization plans can help Romanian high-tech SMEs to increase and do better on digitalization, helping to the transition to Industry 4.0.

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## EDUCATION FOR DEVELOPMENT IN EUROPE

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**Abstract:** *The force which contributes to the positive change of things has been and will remain a solid education. Countries such as Denmark, Sweden, Finland, the United Kingdom, and the Netherlands attach great importance to lifelong learning. Education nowadays is focused on an employability skills approach. The participation of people between 25-64 years in an educational program is important because contributes to the development of the economy. Although there are many initiatives in countries like Romania, Bulgaria, Croatia, Greece, Slovakia, Hungary, and Poland, the average number of people aged between 25-64 participating in an educational program is below 5%. In countries with a rich educational history like Italy and France, the average percentage between 2005-2019 is below 12%.*

**Keywords:** education; development; knowledge-based economy; lifelong learning

**JEL classification:** I23; I25

### 1. Introduction

Education immediately after World War II becomes a long-term, advantageous, and reliable investment that slowly but surely controls the future of nations. Because education has the power to transform people's lives, the European Council promotes lifelong learning. The change started with the first large-scale European initiative called the Lisbon Strategy adopted on 23-24 March 2000. Renewed in Brussels on 22-23 March 2005 due to the deteriorating economic situation, a set of objectives and measures was designed to make the European Union the most competitive and dynamic knowledge-based economy. In the three cycles of implementation of the strategy, it was understood that human preparation is a strong asset, so European countries every day trying to increase the general level of education and reduce education and training abandonment. (Rodriguez et al., 2010, p.11)

### 2. Literature review

Leading economists such as Adam Smith, John Stuart Mill, Alfred Marshall, George Joseph Stigler, and Gary Becker proved the link between a national level of development and education. Friedrich List was convinced that national wealth is the result of investment in education. Irving Fisher, in his studies, showed that education is an investment that has the capability to influence future income levels. Lester C. Thurow was firmly convinced that investment in education is long-lasting. (Badea, 2012, pp.123 - 125)

F. H. Harbison and C. A. Myers in their study developed a system of indicators on human capital, built to highlight the importance of secondary and tertiary education in economic development. (Harbison, 1964, p.9)

3. Adults aged between 25 - 64 years participating in the learning process in 28 European countries

Efforts to encourage lifelong learning at the national and European level are significant. Since 2005, in addition to national institutions and the European Council, organizations such as the European Association for Adult Education, UNESCO, International Education, the Global Partnership for Education (GPE), and UNICEF have joined forces with a well-defined agenda. The success of these efforts is reflected in the growing number of adults trained in educational programs, as we can see in figure 1.

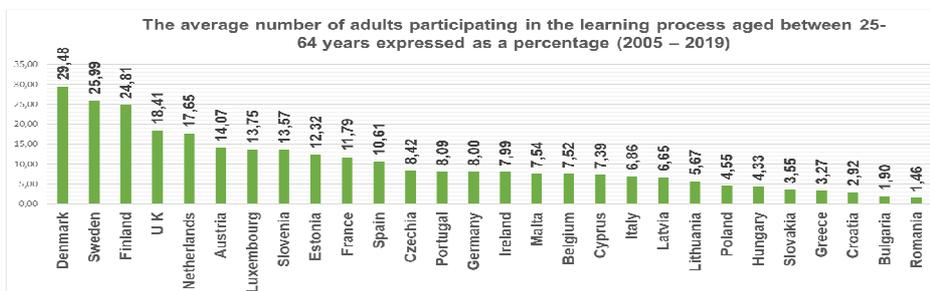


**Figure 1:** The average number of adults participating in the learning process aged between 25-64 years expressed as a percentage (28 European countries)

Source: created by the author, based on information collected from Eurostat

In Belgium the highest values are recorded between 2014 (7.4%) - 2018 (8.5%), which is due to cohesion among the educational system of the Flemish community ("M-decree"), French community ("Pacte pour un enseignement d'excellence"), and German-speaking community. (OECD,2017, p.4) In Bulgaria, for low values between 2006 (1.6%) - 2011 (1.6%) can be blamed insufficient financial and legislative support from the Government. Public spending on education as a percentage of GDP is steadily declining 4.1% in 2014 and reaching 3% in 2019. For the Czech Republic, the best year was 2011 (11.6%), after which there is a steady decline because despite the well-defined objectives there was a break between theory and practice. Denmark manages to reach the highest values, the best year being 2010 (32.7%), thanks to the efforts of the Danish Adult Education Association and the funding scheme that allocates 1/3 of capital for adult education.

With the largest economy in Europe, Germany has an average of 8% because lifelong learning is supported by the governmental initiative named, National Strategy for Continuing Education. (EAEA, 2019, p.28) Estonia, in order to promote development, adopts the Lifelong Learning Strategy, which provides material support to those aged 25-64 who wish to participate in educational programs. Most participants were registered between 2015 (12.4%) - 2019 (20.2%). The participation in Ireland between 2005 (7.4%) - 2017 (9%) is under the sign of education for employability. Starting with 2018 the interest of the population for knowledge and social welfare increases as shown by the values: 2018 (12.5%), 2019 (12.6%). In Greece due to the lack of state strategies, adult education is becoming less and less a priority: 2017 (4.5%), 2018 (4.5%), 2019 (3.9%). In Spain, whose economy recently returned to health after many years of recession the situation is relatively stable with an average of 10.61%. France, the second-largest economy in Europe is part of initiatives such as Europe 2020, Education and Training 2020. Adult education is permanently on the agenda of the French Government, which is reflected in numbers: 2013 (17.8%) - 2019 (19.5%). Despite the Strategy on Education, Science, and Technology adopted in 2014, Croatia continues to face the challenge of being one of the lowest participation rates in adult education: 2014 (2.8%) - 2019 (3.5%) (EAEA,2019, p.18) Italy, the eighth-largest exporter in the world is experiencing steady growth due to the interest of the population for personal development through education, 2005 (5.8%) - 2019 (8.1%). For Cyprus, the most beneficial years were 2007 (8.7%), 2008 (8.8%), 2009 (8.3%), and 2010 (8.1%). Despite the efforts, Latvia fails to reach the value of 2005 (7.8%) by 2019 (7.4%). In Lithuania, thanks to the efforts of the authorities through the National Education Strategy 2013-2022 and the Lithuanian Association of Adult Education with the Baltic Summer School, participation is increasing, 2014 (5.1%), 2019 (7.8%). Education reforms has contributed to the steady growth of values in Luxembourg: 2005 (8.5%) - 2012 (14.2%) - 2019 (19.1%). In Hungary the best year was 2015 (7.1%). In figure 2 we can see the situation in the 28 analyzed countries. For the United Kingdom, the best years were 2005 (27.6%), 2006 (27.4%), and 2007 (20.5%).



**Figure 2:** The average number of adults participating in the learning process aged between 25-64 years expressed as a percentage in 28 countries (2005 – 2019)  
Source: created by the author, based on information collected from Eurostat

The increase registered in Malta from 2015 (5.2%) until 2019 (11.9%) is due to the accessible programs offered by the International schools present in the country. In Dutch society, education is constantly on the agenda of state and non-

governmental institutions. The success of the program like “Tel mee met Taal” is mirrored by the growing values: 2005 (15.4%) - 2019 (19.5%). Values such as 2017 (15.8%), 2018 (5.1%) in Austria are the result of cooperation between the Association of Austrian Adult Education Centers and the Democracy Center Vienna. (EAEA,2019, p.44) Values in Poland do not increase significantly because the Upskilling Pathways initiative is not well implemented. In Portugal, the period 2005 (4.1%) - 2010 (5.7%) is characterized by insufficient funding from the authorities, but after 2011 (11.5%) the values do not fall below 9% due to National Plan on Adult Literacy. Romania has the lowest values. In Slovenia, the period 2005 (15.3%) - 2011 (16%) is the most beneficial. Finland is experiencing systematic and stable growth from 2005 (22.5%) to 2019 (29%). Sweden demonstrates the quality of education through the growing values 2005 (17.4%) - 2019 (34.3%) which bears the mark of The Swedish National Council of Adult Education.

### 3. Conclusions

From the 28 European countries, only 10 manage to obtain an average of over 10% in the period 2005-2019. The highest values recorded in Denmark, Sweden, Finland, and the United Kingdom are not a surprise, because education for them is a landmark. Countries such as Romania, Bulgaria, and Croatia need to review their learning policies. Although 2019 has been beneficial for lifelong learning, we must not forget that it is an ongoing process.

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# EXAMINATION OF PROFIT AFTER TAX IN THE YEAR OF TRANSITION TO IFRS

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**Abstract:** *The primary goal of the presented research is to examine the effects companies face during their transition to IFRS. In the course of the research, only the companies belonging to the BUX index are examined, as these are the most significant listed companies in Hungary. The primary objective of the research is to examine the development of pre-tax profit, tax expenses and profit after tax in the year of transition. Two sets of data are also available per company for the study, since in the year of transition, companies must prepare their financial statements in accordance with the rules of the Hungarian Accounting Act and IFRS. As a result of the examination, it can be clearly stated that a significantly higher amount of profit after tax is reported in IFRS.*

**Keywords:** BUX index, IFRS, transition, separate financial statements; profit after tax

**JEL classification:** M14

## 1. Introduction

Our current era is characterized by rapid cross-border capital flows and extensive international relations. Changes in the global economy are reflected in globalization at every aspect of life, and thus have an impact on the field of accounting. As a result, there is a growing demand by investors to be able to compare economic performance achieved in different countries in a unified system. One of the most important issues for investors during the transition to IFRS is the development of profit after tax. Consequently, it is considered important to examine the development of the profit after tax in the year of transition according to both the Hungarian accounting rules and IFRS.

## 2. Literature review

The section presents the need for the application of IFRS and the components of financial statements in accordance with IFRS.

### 2.1. The necessity of applying IFRS

The world is becoming increasingly globalized. In an expanding global economy, it is in the interest of investors to be able to compare the performance of companies operating in different countries. The annual statements prepared according to the diverse accounting rules of different countries do not provide a clear picture of the business entities. In order for capital owners to be able to choose the most profitable investment option, a unified system is required in which the options can

be compared. Therefore, it became necessary to develop a unified accounting system (Lakatos et al., 2018).

## 2.2. Financial statements in accordance with IFRS

The requirements for the preparation of financial statements are set out in the scope of the IAS 1 standard. The financial statements present the financial position and financial performance of enterprises in a structured manner. The purpose of this is to provide decision-makers with information about the financial situation, performance, and cash flow of business entities, and about how managers handle the resources entrusted to them (Rózsa, 2015).

In accordance with IAS 1, the financial statements include:

- Statement of financial position (Balance sheet)
- Comprehensive profit and loss account
- Statement of changes in equity
- Cash flow statement
- Notes (Madarasiné et al., 2018).

## 3. Material and method

In the course of my research, the development of profit after tax is examined in the case of companies applying IFRS in the year of transition. In the course of the research, only the companies belonging to the BUX index are examined, as these are the most significant listed companies in Hungary. The BUX index includes 14 companies. The data required for the examination are included in the financial statements of the companies prepared in accordance with the Hungarian Accounting Act and IFRS. The financial statements were downloaded from the website of the Budapest Stock Exchange. The research required for the research was performed by document analysis.

## 4. Development of profit after tax of companies applying IFRS

In the course of the research, the development of the profit after tax of companies applying IFRS and included in the BUX index were examined together with their comparison according to the two accounting regulations. The pre-tax profit and the tax expense are closely related to the profit after tax, so it was also necessary to examine the development of these categories. Based on the results of the study, it can be stated that in the system of IFRS most of the examined companies have a significantly higher profit after tax than in the Hungarian accounting environment. Three of the companies included in the BUX index, MOL Plc., Richter Gedeon Plc. And OTP Bank Plc. account for almost 90% of the weight of the index. As a result, the development of pre-tax profit, tax expense and profit after tax is presented through the example of these companies only.

**Table 1:** Development of profit after tax in the year of transition for three large companies

<i>Data in million HUF</i>	MOL	OTP	RICHTER
Pre-tax profit (HAS)	-190072	213192	54810
Pre-tax profit (IFRS)	-253895	193474	59693

Tax expense (HAS)	70	11551	336
Tax expense (IFRS)	56744	21096	5437
Profit after tax (HAS)	-190142	201641	54474
Profit after tax (IFRS)	-197151	172378	54256

Source: own editing based on the financial statements of the companies

As shown by *Table 1*, interesting findings were obtained in relation to the presented large companies. Compared to the other 11 companies included in the BUX index, these companies have a lower profit after tax in the system of IFRS than in the Hungarian accounting environment. The reasons for this will be examined later in the scope of further research.

## 5. In conclusion

The research focused on the development of the profit after tax of companies applying IFRS, in the year of transition. Companies belonging to the BUX index were examined, and the pre-tax profit, tax expense and profit after tax of the three companies with the most significance were presented. Based on the study, it can be stated that the majority of the examined companies have a higher profit after tax in the system of IFRS than in the Hungarian accounting environment. In contrast, the three largest listed companies reported lower profit after tax in the IFRS system. It is planned to examine the exact reason for the above in the scope of further research.

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# MEASURES UNDERTAKEN BY ROMANIAN AUTHORITIES, IN ACCORDANCE WITH EU DECISIONS, TO SUPPORT THE ROMANIAN WINE SECTOR, HEAVILY IMPACTED BY THE COVID-19 PANDEMIC

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**Abstract:** Following the outbreak of the Coronavirus pandemic, the European agriculture faces difficult times. Romania plays an important role in the whole of the European agriculture, being the sixth country in the European Union from the perspective of agricultural surface. The Romanian wine sector is highly impacted by the COVID-19 pandemic. Rapid changes in demand and the closure of bars and restaurants hit the Romanian wine sector at its core. Exceptional measures to support the Romanian wine sector are not only necessary but also vital taking into account the current situation. Wine surplus, lack of workforce and declining sales are only a few of the setbacks that Romanian wine producers have to face. The article is trying to highlight the situation of the Romanian wine sector under current events and the measures that national and European authorities are currently taking in order to support and ensure further development of the sector.

**Keywords:** wine sector; pandemic; support measures; authorities.

**JEL classification:** Q10, Q18.

## **1. Heading: General Introduction or Background**

The leading wine producer in the world is the European Union. In the last six years, the average annual production was 167 million hectolitres. According to data retrieved from the European Commission it accounts for 45% of world wine growing-areas, 65% of production, 60% of global consumption and 70% of exports. In recent years, the wine market has developed considerably. A wine reform adopted by the European Commission in 2008 envisaged three main goals: 1) making EU producers more competitive; 2) achieve a better balance between supply and demand; 3) preserve the best traditions of European wine growing. Regulation (EU) No 1308/2013 offers Member States the possibility to implement five-year national programmes to finance specific support measures to assist their wine sector. Wine producing EU countries may currently offer support for the following measures: promotion in non-EU countries, informing consumers about responsible consumption and EU quality schemes, restructuring and conversion of vineyards including replanting for health or phytosanitary reasons, green harvesting, mutual funds, harvest insurance, investments in enterprises, innovation aiming at the development of new products, processes and technologies, by-product distillation.

In July 2020, the European Commission increased support for the wine industry, as it is one of the agriculture hardest hit sector by the COVID-19 pandemic. The most important measures are the following:

- Temporary derogation from the European Union's competition rules. The Common Markets Organisation regulation (CMO) allows the Commission to adopt temporary derogations from certain competition rules in situations of severe imbalances. The Commission adopted the derogation for the wine sector that allows operators to self-organise and implement market measures in order to stabilise the sector in the respect of the functioning of the internal market for a period of 6 months. This measure allows producers to be exempt from certain European Union antitrust rules, to plan jointly production, storage and promotional activities.

- EU contribution to funding national support programmes increased by 10% and reach 70%.

- The Commission allowed EU countries to provide advance payments to cover the costs of storage and allow producers to distil into alcohol for industrial or biofuel use. These advances cover up to 100% of costs and allows Member states to utilise their national support programme funds for this year.

In addition to these measures, there is also a support package, which helps the wine sector. It includes flexibility of tools to control production potential, the green harvesting tool and the possibility to include temporary new measures as the opening of distillation of wine in case of crisis or aid to crisis storage of wine. According to a preliminary report from the International Organisation of Vine and Wine (OIV), good weather conditions favoured a potentially large 2020 harvest in the European Union countries. The production volume in the EU this year is estimated at 159 million hectolitres, (excluding juices and must), up to 5% more than in 2019. Although preliminary estimates for 2020 wine production in European countries show a heterogeneous situation compared to previous years, Romania shows a negative variation with respect to 2019 and the last five years average.

The evolution of the Romanian wine industry is undoubtable in recent years. Since the EU accession in 2007, the Romanian wine industry experienced consistent growth. There are five measures, within the framework of the actual Romanian National Support Programme: promotion; restructuring and conversion; harvest insurance; investments; by-product distillation. The biggest part of the budget is allocated for the restructuring and conversion measure. Investments in technology, replanting of vineyards with better genetic material and the constant emergence of small-medium size wine producers, focused on quality rather than quantity, brought Romanian wines on the world map again. Data from the International Vine and Wine Organisation puts Romania on the world and European wine map. In 2019, Romania was the 10<sup>th</sup> country in the world in terms of area under vine and the 13<sup>th</sup> in the world in terms of wine production. Among European countries, it is situated as follows: the sixth in terms of wine production and the fifth in terms of area under vine. European funds, foreign investments, determination from local producers, helped the Romanian wine industry to achieve these results. However, the COVID-19 pandemic brought wine surplus, declining sales, lack of workforce, and a lot of pressure on the Romanian wine sector, which relied heavily on the internal market and especially on the Hospitality sector. As mentioned before, in accordance with EU legislation, exceptional temporary measures are adopted, to address market disruption in the Romanian wine sector caused by COVID-19 pandemic. The Romanian Ministry of Agriculture and Rural Development, in accordance with decisions from the European Commission decided that the amount of financial support for the Romanian National Support Programme increases as follows:

- From a maximum of 75% to a maximum of 95% for the restructuring and reconversion of vineyards
- From a maximum of 50% to a maximum of 70% for the promotion in non-EU countries
- From a maximum of 50% to a maximum of 60% for harvest insurance
- From a maximum of 50% to a maximum of 70% for investments in enterprises.
- During the financial year 2019-2020, the introduction of the measure for the distillation of wine with an estimated total value of 20 mil. Euro. The amount granted is 4,63 lei/ litre of wine with DOC, IG and 3, 65 lei/litre for varietal wine which has been distilled.
- Under development is a OUG for the approval of the State aid scheme to support the work of producers in the wine sector in the context of the economic crisis generated by the COVID-19 pandemic:
  - The total amount of the aid scheme is 59, 500 thousand lei
  - Aid amount: the equivalent in lei of 500 EUR /ha but no more than the equivalent in lei of 100.000 EUR for the same beneficiary;
  - Beneficiaries: wine producers engaged in specific activities for the production of wine grapes
  - Duration of application of the scheme: The scheme will apply from the date of entry into force of the provisions of the Emergency Ordinance until 31 December 2020.

## **2. Conclusion**

The first decade after the fall of communism brought many challenges to the Romanian wine sector. A lack of understanding of modern technology, land division, need of capital, were only a few of these challenges. Foreign investors were a part of the change that occurred over the years and of course the positive impact brought by the European funds. Being part of the European Union brought many changes in the Romanian Agriculture. One sector that benefited from the EU accession was the Romanian wine sector. The Romanian wine sector is situated on the world map in terms of area under vine and wine production, unfortunately the sector is very fragile to external shocks. Covid-19 pandemic shook the Romanian wine industry at its core, due to its high dependency on the internal market and especially on the Hospitality sector. Structural problems became issues that some Romanian wine producers cannot overcome. Issues like wine surplus, lack of workforce and declining sales need a support by authorities with measures re-oriented towards crisis management. In accordance with EU decisions, urgent support measures are necessary to maintain the Romanian wine sector at a rescue level. Measures that increase the amount of financial support for the National Support Programme, the introduction of new aid schemes are only part of the plan that the European and national authorities designed for the support of the wine industry. The current European situation regarding the COVID-19 pandemic makes it hard to predict if these measures are likely to succeed. Wine producers fear that declining sales, low exports and the partial closure of the hospitality sector brings damages to the sector that are difficult to overcome.

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## THE FUNDING OF SCHOOL EDUCATION IN ROMANIA

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**Abstract:** *This report wants to reveal where the Romanian funding of school education places comparative to another countries. It provides analysis and mechanisms for the distribution of funding to schools based on OECD report (2017) and describes the policies, governing, distributing, planning and evaluating the use of school funding. Finding the right funding formula may be the key of the performance of all students while also providing more equitable learning opportunities for different groups thus the efficiency of allocation and spending of resources. One of the most important policy concern of governments should be developing effective mechanisms to allocate the funding competing priorities. Evaluation of the actual costs should be based on academic research and evidence of regular audit work.*

**Keywords:** school funding; equity; policies and governing; budget planning; performance; management responsibilities in education;

**JEL classification:** I220; I240;

### 1. Introduction

This paper aims to make a brief analysis of the financing of the Romanian educational system, given the importance of policies in this sector of activity and to outline some directions to find the most efficient way to support the achievement of equity objectives through school funding mechanisms.

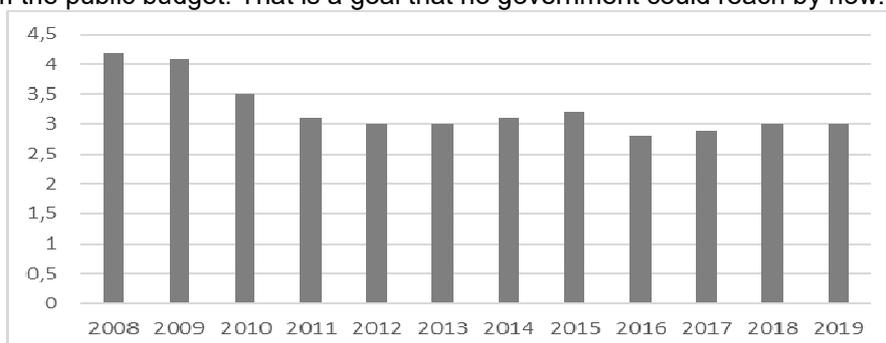
It is recommended that the authorities seek to ensure: the roles and responsibilities in decentralised funding systems are well aligned; a stable and predictable allocation of public funds to school; an adequate accountability and transparency; the evaluation and monitoring such that the available resources are used efficiently and equitably.

### 2. Literature review

Over the time there has been a lot of research on education and funding for education systems around the world. Education funding has been studied in terms of government policies (Lafortune et al., 2018), cost studies and equitable spending of resources (OECD, 2017), compared to other countries (Tusa et al., 2012) or develop the relationship between school funding and student outcomes (Tyner, 2020).

## 2.1. School funding policies

The school funding comes mostly from public budgets. Education funding policy is oriented towards to improve the quality of school systems and reduce the inequity between different regions, richer or poorer. According the legislation (Law 1, 2011) a minimum of 6% of the GDP should be annually allotted to finance the education, from the public budget. That is a goal that no government could reach by now.



**Figure 1:** Total public expenditure on education as % of GDP

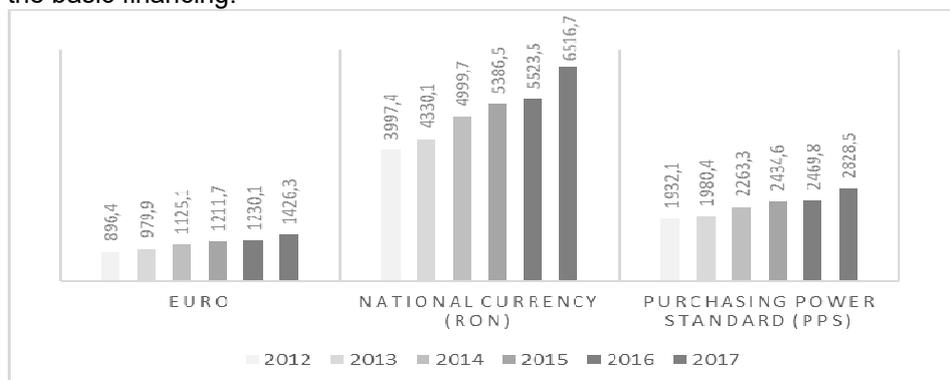
Source: <https://ec.europa.eu/eurostat/data/database>

## 2.2. Governing school funding

School systems are characterised by multi-level governance and it have 3 units of funding: basic (lead by central government), complementary (local government) and additional (funds attracted by schools).

The funding system is based on a formula in which the financial resurces follows the student. The budget allocation takes into account the standard cost per student, the number of students in the educational unit, as well as the correction factors depending on the regional disadvantages, the minorities languages learning and other factors.

The public expenditure on education has increased annually, but schools are having difficulties, some of them because the budget is not enough to cover the costs, others because cannot spend all the money they have due to the limits of the basic financing.



**Figure 2:** Public expenditure on education per pupil/student based on FTE by education level and programme orientation

Source: <https://ec.europa.eu/eurostat/data/database>

### 3. Distributing schools funding

The basic financing is ensured from Central budget as amounts deducted from GDP and is distributed to schools as follows:

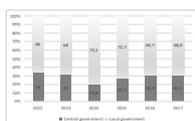
- By State budget through County School Inspectorate for wage costs;
- By Local budget through Administrative and Territorial units for material and service costs.

The complementary financing is ensured and distributed from Local budget for:

- Investments, capital repairs;
- Other costs than current maintenance costs.

Supplementary financing is granted by Administrative and Territorial units based on their own methodology.

Also, schools can attract funds through donations, sponsorships, European funded projects or other methods provided by law.



**Figure 3:** Funding of education by education level, programme orientation and recipient of funding

Source: <https://ec.europa.eu/eurostat/data/database>

#### 3.1. Planning the use of school funding

Thinking differently, particularly in terms of what school facilities will look like and the roles they will fulfill, as Stevenson (2010) mentioned, must become a very necessary part of the long range facilities planning process.

The annually planning of the budget can be provided for the basic financing knowing the use of objective criteria (such as number of students enrolled and the geographical area). For the complementary budget it is ensured by the schools and approved by local authorities. Every entity can establish its own priorities and decides, through its management, the distribution of current expenditure.

A difficulty encountered could be the ignorance of the schools board to manage responsible the resources.

Decentralising resource management responsibilities is the key of the budgeting success, but it requires a good management knowledge for the board of schools and a participation of the main stakeholders, policy makers and institutions in order to consolidate the education system.

### **3.2. Evaluating the use of school funding**

Evaluation systems are limited in the information they can offer. While the financial data can be verified on specialized platforms and periodically by internal management and control, individual performance management, external audit, the performance of the educational system is difficult to quantify. School boards, usually composed of teachers, representatives of parents and local community can play a key role in monitoring the use of budget at the school level and in promoting transparency at the decision-making level.

## **4. Conclusion**

Broadly, the financing of the Romanian education system fits to the recommendations made by OECD regarding the standard cost formula. Authorities need to improve on:

- The allocation of financial resources for children with special educational needs;
- Legislation on complementary funding that is not clear enough;
- A rethinking of the possible expenses made from the basic financing;
- Adjusting for structural differences in operational costs, such as lower class size.

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## OPTIMUM ATTENTION FOR EMOTIONS OF MAXIMUM INTENSITY. A NEUROMARKETING APPROACH

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**Abstract:** *“The more, the better” is the implicit mantra when it comes to demanding attention from consumers. Be it in modern theoretical models or well-established practitioners’ benchmarks, we take for granted that eliciting more attention is for the better. We acknowledge that getting more attention from the consumers would most frequently benefit many marketing stimuli in the real world; nevertheless, we hypothesize that optimum rarely equates to the maximum or an industry implicit heuristic rule. We also believe that the cognitive load and the initial subjective assessment of a stimulus are major determinants of the optimum level of attention it should get to derive the maximum intensity of positive emotions. We try to obtain a function predicting the optimum number of exposures for an advertisement to cause the maximum intensity of positive emotions. We shall expose the first group of respondents over two months to several advertisements inserted in 30-60 minutes experiments; we shall record their emotions (valence and intensity) and cognitive loads helped by an electroencephalogram (EEG) device. We’ll develop a function predicting the optimum exposure times trying several machine-learning algorithms and we’ll test the positive emotions optimizing program against a new set of advertisements and respondents.*

**Keywords:** neuromarketing; attention; emotions; broadcasts; EEG; machine-learning

**JEL classification:** M31; M37

### 1. Background

Winning potential customers’ attention has always been one of the main (successful)business concerns, and today’s richer than ever informational environment makes stimuli’s ability to get noticed of paramount importance. In neuroscience’s terms, we may process 50 bits of information out of the 11 million we are exposed to every second, or, in a very familiar setting, we notice a tiny part of the over 100 thousand SKUs demanding our attention on a fast shopping trip in a regular hypermarket.

Nevertheless, being noticed is but the first necessary step in a repeated buying decision. Package designers, advertisement creators and, media campaign coordinators, to mention just a few, strive to make various offers desirable; most often, liked. Indeed, more and more studies find a significant correlation between the positive valence intensity of emotion and the looked-for buying decision. The associative way our brains function increases the chances our offer will be liked if any of our advertisements, package, endorser, or company’s social image is liked.

Until recently, emotions stemming from advertisements could be assessed almost entirely via self-reporting, be it in quantitative research, qualitative research, or other methods. Subjective self-reporting makes such attempts so ineffective that many experienced business leaders stay away from them altogether or usually adjust the findings with inputs from their own perceptions. A study conducted by Nielsen in 2016 found that classical surveys were able to predict advertisement ability to determine purchasing in one out of five cases – so, most often they were wrong (on the other hand, EEG based inquiries were successful in more than 70% of the instances). Recent neuroscience studies did find a beneficial impact of attention (as length a respondent is exposed to a stimulus) on the intensity of the positive emotion that stimulus elicit. Nevertheless, we usually have only one exposure and time varies just in the range of a few seconds as the interest is mainly in the original perception formation and the first decision, made in the first hundreds of milliseconds.

EEG recording and specialized software make easy not only to figure out what are the overall emotions generated by an advertisement but to see them second by second, thereby eliminating three main sources of self-reporting ineffectiveness: a) only 15% of our decisions' influencing perceptions and emotions depolarize the neurons in the cortex responsible for consciously realizing them; b) front vs. backstage behavior considerations will rarely allow us to declare the entire realized 15% to a third party, and c) each time we recollect an episodic memory we alter it due to, *inter alia*, the associative character of thinking and our need of cognitive coherence. Moreover, by analyzing the brain waves, EEG based research allows for discriminating between external stimuli induced and day-dreaming activity-induced emotions. We shall thereby have the best possible data quality on the cognitive load, valence, and intensity of emotions caused each second by the presented advertisement.

There are several other instruments easier to use (hear-rate, pupillometry, facial coding, respiratory rate, galvanic skin response, and so on) but they are either simply unable to measure the valence of emotion, lack a decent success rate in so doing, or have a too poor time resolution, making impossible to correlate the emotion with the causing stimulus. There is plenty of statistical studies confirming this situation and the explanation is straight forward: biometric instruments rely on muscles activity induced by motoneurons excited by their correspondent areas in the central nervous system which in turn are stimulated by other brain structures responsible for emotions while EEG sensors record directly the spikes of the neurons in these structures and circuits. Pupillometry, for instance, is not able to distinguish between positive and negative emotions, and, while may do a great job at identifying the emotions' intensity, would be greatly invalidated by a luminosity change.

## **2. Study description**

With the above-mentioned instruments, we feel confident to attempt to scientifically improve some of the most frequent decisions marketing practitioners have to make when drafting a (TV) advertising campaign; we assume throughout this project that the objective of the campaign is to maximize the positive emotion intensity caused by the advertisement (specific memory formation and consolidation studies are

available as a starting point if the primary objective is for the advertised offer to be remembered, as the case may be in various product life-cycle stages):

- To stay with the classical 30" ads, to go for shorter or longer durations?
- To have one or two inserts in an advertising block? Within an hour?
- Are industry benchmarks such as "1+" and "3+" not enough, just right or misleading?
- Is the n-th exposure still adding to an emotion's intensity, decreasing or turning its valence (from positive to negative, in this instance)?

While some final refinements of the methodology are still to be decided upon and will be presented once the study is finished, the main aspects and their rationale are as follows:

- At least two distinct respondent groups will be used, one for fitting the proposed model(s) and one for verifying its effectiveness. Even if numerous neuroscience studies use as few as 20 respondents, arguing that the variance in brain functioning is less than the variance of the normal distribution implicit in most behavioral studies, until we have an estimate of this variance we shall stick to 32 for statistical validity.
- Actually, as the first part of the study will last about two months, we shall try to start with more than 32 respondents to provide for potential withdrawals.
- We'll expose the respondents to various ads for about 60 days to mitigate the standard one month campaign with the longer period an advertisement may be presented (more campaigns with the same ad).
- We plan to use six ads (10", 30" and 45", with high and low intensity initial positive emotions, respectively. We shall choose the ads so that the lab to be the only place when the respondents to be exposed to them during the experiment. Ideally, the respondents will not interact with either the product/service or any other promotional materials related to the ads. The first block will include more ads for each time length, out of which we shall select the ones with the minimum and maximum emotion intensity, respectively.
- Each time, ads will be presented within a one-hour block of various stimuli. Positioning will vary within the group, allowing for further hypotheses development concerning the influence of conditioning on the emotions' intensity.
- Emotions and cognitive loads will be recorded via a saline solution sensors EEG, interpreted with a high-performance software application, and checked manually according to a pre-established algorithm.
- Finally, various machine learning logarithms would fit these data with variables such as the number of exposures, advertisement length, advertisement first set of cognitive and emotional scores, while we shall still check for potential spurious correlations.
- The simplest neural network-based algorithms would equate the emotion's intensity as a function of duration and exposure times, while the most complex ones will also consider the impact of the other decisions discussed earlier
- The algorithms with the best fit will be checked against a new set of respondents and ads

### **3. Conclusions, shortcomings, and further developments**

The results of the current project will provide campaign planners with valuable scientific insights to guide their real-life decisions, as long as the main purpose of the exercise in question is to maximize the emotions' intensity an advertisement may cause. We saw that current instruments allow for significantly better results than the self-reported likeness scores and that prior public Neuroscience studies on attention-emotions relation have been focused on much shorter time intervals than the ones under control in the marketing world. We shall move away from marketing deciders' subjective evaluation of the emotional and cognitive content of the advertisement, into scientifically-based assessments, and this time the effort will be worth it.

"Adding an emotional touch" has long been advocated by brand builders, and current scientific research does find robust correlations between the intensity of the positive emotions a brand elicits and its loyalty and sales figures. However, these correlations are mediated by many other factors and we will be reluctant to propose a clear level, despite some other studies putting various figures forward. To confidently propose such a figure, we need a large amount of data we cannot generate at this moment and seems to not exist (at least not in the public area). In the absence of such an estimate, business decision-makers may find it difficult to commit extra-effort to reshape advertising campaigns, especially in integrated media exercises.

Moreover, campaigns are rarely focused solely on eliciting emotions and improving brand image and loyalty; the implicit approach is frequently that a good marketing effort will also bring some awareness (memory), some advantage over a specific competitor, and so on. To start with, memory specific studies will greatly benefit campaigns aimed at increasing awareness and familiarity, consolidating the memory or placing an offer on top of the consumer's mind. All these are beyond the scope of the current project.

Our research takes many possible determinants and mediators of emotional responses into account. However, some others are disregarded, even if they are known to be important. For instance, we do not take into account the impact of consumers' experience with the product before or during the campaign, and the conditioning aspect is only marginally tackled due to logistic considerations.

More research will be needed to significantly change most of the marketing industry decisions from heuristics to science and data-based. Neuroscience instruments have already proved of extraordinary value in areas pertinent to marketing, such as memory formation, consolidation and retrieving, decision making, perceptions, emotions, and many more. This study attempts to make use of such techniques' benefits into the time, objectives, and constraints framework marketing decision-makers usually act in.

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## SHOWING CARE FOR MENTAL HEALTH VIA DIGITAL TOOLS. HOW MUCH DOES AGE MATTER?

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**Abstract:** *Digitization is a phenomenon approached, in recent years, by actors in every domain and field of activity. Mental Health is a topic that lately started to gain more and more attention from both individual and organizational consumers and providers. Depression is currently one of the largest contributors to the global burden of disease worldwide. This paper discusses whether and how adults of different ages perceive digital tools and instruments as ways for mental health concerns' manifestation and how does age influence digital tools adoption for mental health needs. For this, a quantitative research method was used on Braşov County's adult population. The Median Test was applied to achieve the set goal. The results state that there are differences in the way different age groups perceive using digital instruments for their mental health concerns. The outcomes are useful for both academics and specialists in the health field to set eHealth policies and strategies and to create more patient-centered mental health services.*

**Keywords:** Digital Tools; Mental Health; Depression; Quantitative Research.

**JEL classification:** I10; I12; C10; M39;

### 1. Background

Mental health is by far raising concerns at a global level for years now. Lately, depression became one of the leading causes of disability in the world, having a major contribution to the global burden of disease (World Health Organization, 2020). By 2030, studies estimate that depression disease will become the largest contributor to the global burden of disability worldwide (World Health Organization, 2017). In Romania, the incidence of depression is about 5%, with over 900,000 cases diagnosed annually (Ministerul Sănătăţii, 2019).

Several studies have demonstrated the effectiveness of digital solutions implementation in depression treatment or health conditions improvement (Meglic et al., 2010; Casey, 2013; Stratton et al., 2017; Berrouguet, 2018). As the population's mental well-being comes with great implications for the economic well-being of the entire society, promoting mental well-being and preventing mental illness become of great importance, especially in the context of society's current challenges (Consiliul Uniunii Europene, 2011). Since any medical system that aims to implement solutions for the digitalization of health services must be prepared not only legally and financially, but also has to focus on education for such solutions to work (Scott and Palacios, 2003), age becomes an important vector to be considered in the design, implementation and adoption of digital tools as solutions for mental health care services.

## 2. Research Objective, Methods and Data

The main objective of this paper was to determine whether age influences the way adults from Braşov County perceive the use of digital tools such as mobile apps, websites etc, as ways for their mental health concerns' manifestation.

Quantitative market research based on a survey was carried out. Data was collected through a questionnaire that was applied using the Computer Assisted Web Interviewing method. The questionnaire included 29 questions, of which 23 questions regarding the opinions, attitudes and behaviors of adults in Brasov on the use of digital tools for depression prevention and 6 questions to identify respondents. 514 subjects, women and men over the age of 18, living in Braşov County were interviewed. The answers were manually coded and the SPSS version 25 was used to manipulate the collected data.

To achieve the set goal for this paper, the research methodology was based on, a non-parametric statistical test used to test whether independent groups differ in central tendency. Therefore, the null hypothesis ( $H_0$ ) stated that there is no connection between the age of the people of Brasov and the statement "*The concern for mental health manifests when I use applications and gadgets to monitor my effort, stress, diet, sleep, etc.*" Given that the question of showing concern for mental health by using technology was built on an ordinal Likert scale, and the characterization variable was composed of 5 groups, to test the above hypothesis the author chose to apply the Median test.

## 3. Results and discussions

In the initial phase, the relative frequencies were calculated using the SPSS software package, the following data being obtained:

**Table 1:** Observed Frequencies by groups (% within Age Group)

Showing concern for mental health via digital tools use	Age Group (years):					Total
	18-29	30-39	40-49	50-59	60≤	
Strongly disagree	2.0%	3.4%	17.3%	25.6%	58.3%	10.4%
Disagree	9.8%	8.5%	14.7%	28.2%	8.3%	12.4%
Neither agree, nor disagree	24.5%	24.6%	34.7%	30.8%	25.0%	27.5%
Agree	31.4%	33.9%	25.3%	12.8%	8.3%	28.0%
Strongly agree	32.4%	29.7%	8.0%	2.6%	0.0%	21.7%
<b>Total</b>	100%	100%	100%	100%	100%	100%

Source: Authors', SPSS Output

Out of the 514 respondents, 346 subjects gave complete answers to the question related to of showing concern for mental health by using digital tools. Thus, at the sample's level, the percentage of those in the 18-29 age group for whom using digital tools is a manifestation of their concern for mental health (31,4% agree with the statement, while 32,4% strongly agree with the statement) is higher than that of the other categories. Besides, the percentage of those aged 50-99 who do not agree that showing concern for mental health means using digital tools is higher than the other categories. Analyzing the data in Table 1, we can state that the

existence of differences between the 5 age groups, meaning that there may be a link between the two variables included in the analysis. Thus, the median test was applied to verify the aforementioned hypothesis.

**Table 2:** Frequencies above and below median

Showing concern for mental health via digital tools use	Age Group (years):				
	18-29	30-39	40-49	50-59	60≤
> Median	65	75	25	6	1
≤ Median	37	43	50	33	11

Source: Authors', SPSS Output

The median is given by the answer variant "Neither agreement nor disagreement". As stated in Table 2, the younger population (18-29 and 30-39 years old age groups) are way more positive about using digital instruments as a way to show their concern for mental health, their answers being positioned above the median. On the other hand, the over 40 years old population's majority answers are positioned below the median, thus meaning that advancing in age turns into less embracement of digital tools to manifest the concern for mental health matters. The output of the applied Median test is stated in Table 3.

**Table 3.** Median test's results

	Showing concern for mental health via digital tools use
N	346
Median	3.0000
Chi-Square	51.713b
df	4
Asymp. Sig.	.000

a. Grouping Variables: Age:

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.0.

Source: Authors', SPSS Output

$X^{2calc}$ , obtained by applying the non-parametric Median test is equal to 51,713. Comparing this with the theoretical  $X^{20,05,4}$ , whose value equals to 9,488, as resulted from applying the CHIINV function in Excel, the author rejects the null hypothesis and accepts the alternative one, because of  $X^{2calc} > X^{20,05,4}$ . This means that, for a 95% probability, there is a link between the age and the extent to which the adult population living in Braşov county agree that the manifestation of mental health concerns is manifested through the use of technology tools (applications and gadgets for monitoring effort, stress, sleep, diet, etc.). The relation Asymp. Sig = 0.00 <  $\alpha$  = 0.05 drives to the same decision of rejecting the null hypothesis.

#### 4. Conclusion

The main objective of this paper was achieved. The results state that there is a link between age and the degree to which the adults living in Braşov County agree with the use of digital technology to show concern for their mental health. Thus, younger adults tend to embrace more the adoption of digital tools for their mental health

matters, while elders tend to deny the digital tools for their mental health concerns. Thus, practitioners need to consider the differences in the behavior of population by age groups when designing digital mental health policies and strategies to create more patient-centered services.

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## IFRS 9-QUANTITATIVE CREDIT SCORING METHODS

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**Abstract:** *The IFRS 9 standard has introduced the necessity to compute lifetime expected credit loss, hence institutions had to use modelling techniques different to those used for the established Internal Ratings Based (IRB) regulatory-capital estimation purposes. In an IFRS 9 context, a financial institution relies on rating systems which are based on historic data to produce credit risk ranking systems. The resulted ratings are then used in twelve months and lifetime PD estimation. Hence the lifetime PD models used in IFRS 9 are as good as the underlying data used. Thus, financial institutions that use ratings as risk drivers for lifetime PD models must have in place validation and monitoring tests to assess credit scoring models quality. The key quantitative validation tests techniques institutions should use to assess the adequacy of its credit-scoring framework for assigning credit grades to exposures are as follows: Kolmogorov Smirnov (KS), Lorenz Curve (LC) and Gini, Receiver Operating Characteristic curve (ROC), Somers' D, Population Stability Index (PSI), Information value (IV). This paper outlines Population Stability Index (PSI) test that institutions should use to assess the predictivity of its models and how representative the population of exposures the model was developed on is to the population of exposures that the model is applied to. These tests are of utmost importance in determining the adequacy of the rank ordering of the credit grades, however they do not assess the adequacy of the quantification of the provision estimates.*

**Keywords:** Financial Institution, Quantitative Validation Tests, IFRS 9

**JEL Classification:** G20, G21

### 1. Introduction

The requirements linked to the introduction of the rating system is set by the Basel (II) requirements i.e. financial institutions compute the capital charges for unexpected losses considering an infinite granular and diversified portfolio split using a rating system based on grades of obligors. In order to enable the model to be applicable to all banks regardless of the business model or geography, the regulatory capital formula is based on the following assumptions: the capital allocated to any given loan depends on the risk of that loan and not on the portfolio as the model is applicable to a wide range of countries, institutions and portfolios.

The Basel capital requirements are based on obligor-specific characteristics which are used in deriving the key risk parameters: probability of default, loss given default and exposure at default used to determine unexpected losses estimates,

furthermore the IFRS 9 requirements also specify the same regulatory parameters could be used for the computation of the expected credit losses upon applying specific adjustments i.e. integration of forward looking variables and computation of lifetime estimates.

In more detail, credit scoring refers to the set of techniques used by institutions to assess an obligor's creditworthiness (riskiness) by using predictive models to facilitate the credit assessment process i.e. the obligor is accepted based on the institution's risk appetite as well as the maximum value that could be lent. Keeping in mind the enhancement of the institution's profitability. Hence, they have a predictive scope rather than identification i.e. they do not identify "good" or "bad" obligors, they assign a score that is an indicator of the forecasted risk of the obligor in comparison to all other obligors in the portfolio. The insight gained from the output scores, should be integrated into the decision making process.

Based on best practices, the logistic regression, linear regression and neural networks are the most common used methods for modelling credit scorecards.

The process for developing the scorecards is based on the analysis of the relationship between the available qualitative and quantitative variables and the observed default rates as well as increase understanding of the risk imbedded in the portfolio based on the shape of the curve, turning points and other changes in gradients.

The main stages in scorecard development are the:

- Establishment of the raw data sample, exclusions and treatment of data quality issues;
- Delineation of the Definition of Default criteria i.e. the "good" represent the obligors for which no default criteria are triggered while the "bad" obligors represent the obligors for which the default criteria have been triggered;
- Selection of long list of variables to be used in the scorecard construction
- Selection of the short list of variables, based on statistical and qualitative techniques i.e. Information Value, correlation;
- Divide the sample in development and validation;
- Initial validation followed by period validation and monitoring;

In an IFRS 9 context, the rating system plays an important role as a significant increase in the riskiness of an obligor would lead to the computation of lifetime provisions.

Under the IFRS 9 framework it is expected that the output of the rating system is reviewed against realised migrations. In order to ensure a strong validation process is in place, the assessment should be based both on an out-of-time and out-of-sample assessment. A reliable validation process should be based on a comprehensive set of statistical tests with a predefined set of thresholds and actions to be undertaken in case they have been breached.

## **2. Research Metodology**

The methodology of the scientific research that we will use in this paper combines the qualitative research with the quantitative one, stating that the efficiency of the results obtained from the research would be greater if an optimal combination between the qualitative research and the quantitative one was achieved, in order to meet the objectives, set.

Population Stability Index (PSI)

PSI quantifies shifts in population dynamics over time. As it is based on historical datasets, it is necessary to ensure that the features of the current population are similar to the historical population from which the model was developed.

$$PSI = \sum \left( \left( \frac{n_{dt}}{N_d} \right) - \left( \frac{n_{vt}}{N_v} \right) \right) * \ln \left( \frac{n_{dt}}{N_d} / \left( \frac{n_{vt}}{N_v} \right) \right)$$

Where:

$n_{dt}$  – Number of observations in the  $t^{th}$  grade;

$n_{vt}$  – Number of observations in the  $t^{th}$  grade of the validation/monitoring dataset;

$N_d$  – Total number of observations in the development dataset;

$N_v$  – Number of observations in the validation/monitoring dataset;

Credit scoring literature considers that PSI has the following interpretation:

- PSI > 0.25 – significant population shift;
- 0.10 ≤ PSI ≤ 0.25 – minor population shift;
- PSI ≤ 0.10 – minimal population shift;

For assessing the stability of a scorecard, accounts can be grouped into pools based on particular characteristics or rating grades. As well as conducting this test at an overall portfolio level, this test should also be carried out at a scorecard factor level by comparing the stability of the population in each factor scoreboard to identify any material shifts evident since the development of the model which can indicate that factors need to be either re-banded or removed from the scorecard.

Based on the data presented in table no.1<sup>1</sup>, the PSI for a portfolio over a 2 years time horizon was assessed. The results are summarised in the following table no.2 and show that the PSI over the entire period is lower than 10% hence there are minor shifts in the portfolio over time:

Class/Period	Class 1	Class 2	Class 3	Class 4	Class 5	TOTAL
Period 1	789.0	43.0	5.0	7	4.0	848.0
Period 2	776.0	51.0	6.0	7	5.0	845.0
Period 3	785.0	45.0	6.0	7	5.0	848.0
Period 4	791.0	56.0	8.0	5	5.0	865.0
Period 5	814.0	60.0	7.0	8	5.0	894.0
Period 6	852.0	58.0	6.0	6	6.0	928.0
Period 7	886.0	59.0	7.0	7	6.0	965.0
Period 8	962.0	59.0	7.0	3	6.0	1,037.0
Period 9	991.0	82.0	7.0	6	6.0	1,092.0
Period 10	1,073.0	63.0	6.0	3	6.0	1,151.0
Period 11	1,132.0	60.0	6.0	4	6.0	1,208.0
Period 12	1,134.0	77.0	6.0	5	6.0	1,228.0
Period 13	1,158.0	59.0	7.0	3	7.0	1,234.0
Period 14	1,148.0	55.0	7.0	3	7.0	1,220.0
Period 15	1,127.0	77.0	8.0	7	7.0	1,226.0
Period 16	1,142.0	71.0	6.0	8	7.0	1,234.0
Period 17	1,162.0	74.0	8.0	7	7.0	1,258.0
Period 18	1,164.0	87.0	8.0	7	7.0	1,273.0
Period 19	1,207.0	79.0	8.0	5	7.0	1,306.0
Period 20	1,232.0	77.0	10.0	5	7.0	1,331.0
Period 21	1,189.0	90.0	11.0	10	8.0	1,308.0
Period 22	1,185.0	92.0	9.0	7	8.0	1,301.0
Period 23	1,181.0	92.0	11.0	6	8.0	1,298.0
Period 24	1,157.0	100.0	11.0	9	3.0	1,280.0

Table 1

Class/Period	PSI
PSI 1	0.233%
PSI 2	0.100%
PSI 3	0.392%
PSI 4	0.173%
PSI 5	0.159%
PSI 6	0.022%
PSI 7	0.448%
PSI 8	0.719%
PSI 9	0.952%
PSI 10	0.071%
PSI 11	0.340%
PSI 12	0.536%
PSI 13	0.017%
PSI 14	0.922%
PSI 15	0.109%
PSI 16	0.058%
PSI 17	0.152%
PSI 18	0.168%
PSI 19	0.041%
PSI 20	0.519%
PSI 21	0.114%
PSI 22	0.043%
PSI 23	0.545%

Table 2

<sup>1</sup>The following portfolio was randomly generated

### 3. Conclusion

The introduction of the IFRS 9 standards has meant that institutions have had to place more emphasis on credit risk models to estimate credit loss provisions. Due to this increased reliance on the outputs of models, it is imperative that institutions have robust practices in place to validate the adequacy of the output of these models. Failure to have robust practices in place can leave institutions highly exposed to the risk of not being adequately provided for to withstand credit losses when they are incurred.

Further consideration is expected to be given to the institution's risk rating mechanism and scorecards in the context of high volatility macroeconomic conditions and the impact they could have on grade migration as well as the recognition of significant increase in credit risk.

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## ENTREPRENEURSHIP IN THE 21<sup>ST</sup> CENTURY. INNOVATION, CREATIVITY, GLOBALIZATION

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**Abstract:** *In the entrepreneurial environment of the 21st century, changes are taking place constantly. Business performance benchmarks are changing and competition is more pronounced. The current economic conditions and fierce competition prevail today, are forcing companies to look for new ways to reduce costs and increase profitability. If a company expects to survive and grow, it needs constant creativity to differentiate, add value, and create a competitive edge. Therefore, business organizations need continuous innovation, rapid response, and creative human talent. This paper presents an essential aspect of entrepreneurship in the 21st century, the importance of innovation and creativity, and the role they play in the global entrepreneurial context. It describes the importance of innovation and creativity in today's global entrepreneurship, the importance of knowing the difference between creativity and innovation, and the advantages it has over entrepreneurship all over the globe. The aim of the article is to emphasize the connection between creativity and innovation, as well as the strategy to encourage creativity and innovations among entrepreneurs in today's competitive business environment, as long as creativity generates new ideas and innovation materializes them. The globalization topic summarizes the evaluation of entrepreneurial opportunities and explains the objectives involved in global entrepreneurship.*

**Keywords:** entrepreneurship; innovation; creativity; progress; globalization

**JEL classification:** A10, B10, L26, O31

### **1. Introduction and the conceptual framework of entrepreneurial science evolution**

In the new global economy of the 21st century, increased importance and complex challenges have been brought by the role and functions of entrepreneurship. Globalization, innovation, trade liberalization, information, and communication technology are at the core of the 4.0 Industrial Revolution, performing the main features of the 21st-century economy, and creating a proactive approach regarding the global development of the entrepreneurship ecosystem (Mason and Brown, 2014). In fact, the presence of entrepreneurs and entrepreneurship is necessary to encourage and introduce change in society through the innovation process. In these circumstances, we could affirm that today we are globally united by the economy, not by politics or governments.

Entrepreneurship is an attendant pattern of involving individuals in community life. The development of entrepreneurial skills has positive effects on social status in

the sense of gaining financial independence and social recognition. In addition, the effects are felt at the local and national levels, through economic growth and implicitly the increase of the living standard. The motivation for the research evoked with the understanding that we are part of an economic system and our role is to develop and support it. The more we know about this role, the better we will prepare for a career or way of acting in society, through a balanced control of finances and assets. What we learn today, we will apply tomorrow, the result being a higher degree of welfare.

The entrepreneurship ecosystem is constantly evolving. With the advancement of science and technology, it has passed the stage of metamorphosis and has become a critical element for global economic and social development.

In the early 19th century, the French economist Jean-Baptiste Say also formulated a straightforward definition of entrepreneurship, saying that it "gives economic resources greater productivity and efficiency (Ghicajanu, 2015). Taking a step further in the field of entrepreneurial mentality, we find that entrepreneurship can also be understood as a special type of thinking that allows innovation or even the reform of a particular field, market, or industry.

According to the Austrian economist Joseph Schumpeter, an entrepreneur is a person who is willing and able to turn a new idea or invention into a successful innovation (Reisman, 2004). Thus, entrepreneurship beyond the economy and beyond business is an attitude, the entrepreneur owns a set of characteristics that are not necessarily transformed into capital.

Like any other field, entrepreneurial science is based on certain theories. Originally, these theories started from simple ideas, transformed into hypotheses and proved to be true through research, and experiments. In the same way, different theories have been proposed in entrepreneurship in order to explain the factors underlying entrepreneurship and entrepreneurs. However, at the present time, we do not have an unanimously accepted definition of entrepreneurship because the diversity of features and directions that economics are analyzing cannot be included in a common theory or vision.

## **2.The importance of creativity and innovation in entrepreneurial development**

The highly competitive nature of nowadays business environment demands creative and innovative ideas in order to achieve dominant success. Although the provision of quality services is the essence of a successful business, resourcefulness ideas are advancing, so a company has no chance to gain this competitive game in the absence of creativity and innovation. Scientific analysis and mathematical skills cannot come down to a model in order to define problems and to look for alternative solutions, because in the business environment, cost-benefit analyzes cannot pinpoint alternative solutions, having exclusively the role of tools meant to understand the nature of a problem. Regarding this statement, we can understand that creative and imaginative thinking, when applied along with the internal knowledge of a problem, can produce prosperously alternative solutions.

Similar to the concept of value innovation, Peter Drucker (1909 - 2005) asserted that "most innovations, especially successful ones, result from a conscious and deliberate search for innovation opportunities" (Hoyos and Braun, 2010). In other words, the effective search for Drucker argues that management must intentionally explore all of these sources of new opportunities and that the practice and

discipline of innovation can be to some extent systematic, guided by perseverance and focused exploration.

Joseph Schumpeter's (1883-1950) innovation thesis on entrepreneurship describes the profile of the entrepreneur according to three major characteristics: vision, innovation, and creativity (Mehmood and Alzorubi, 2019). According to this theory, the entrepreneurial framework is formed when the entrepreneur performs a series of actions: creates a new product, introduces a new way of manufacturing a product, discovers a new market for a product, finds a new source of raw materials, and finding a new way of doing things or organizing them. However, Schumpeter's theory of innovation ignores the entrepreneur's ability to take risks and using the appliance of organizational skills but places undue importance on innovation.

### **3. Entrepreneurship in the context of globalization. Global entrepreneurship objectives**

Globalization has removed national borders and made geographical location irrelevant, a context in which the ability to acquire a global perspective is one of the main goals of entrepreneurship, the global vision offering the advantage of facilitating the integration of the global economic opportunities. The local, regional, or national business environment is significantly different from the international business system. For example, a national brand requires a scaling from the national image to a global image. This requires the adoption of the same quality standards worldwide in a consistent manner, but at the same time incorporates the flexibility to adapt the packaging or image of the product to the customs and traditions of the local market, which raises issues of entrepreneurial culture of the particular states.

The globalization of the economy began with the gains brought by the Industrial Revolution, associated mainly with economies of scale. Economies of scale accumulate when the manufacturing cost of a production unit decreases as the output rate increases before the level of profitability decreases. Economies of scale are a result of the internal structure of each business venture. Mass production of durables consuming goods using the assembly line production method is a proper example of gains from scale economies. The perpetual economic development that comes down with the new global economy, has amplified the interdependence of nations and improved the links between production and marketing. At the core of this transformation is the nascency of the global entrepreneur, with the ability to adopt a global mentality in the pursuit of entrepreneurial initiatives. In view of the global strategy, the contemporary entrepreneur must expand his mentality in order to incorporate multidimensional relationships and complex social, cultural, economic, and political realities.

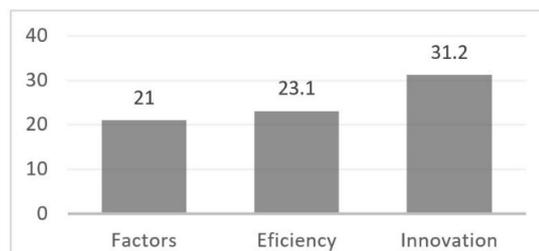
#### **3.1. Adaptation to cultural diversity**

The cultural diversity of the workforce is an economic attribute that must be put into practice for strategic business advantage. This aspect involves the ability to communicate in the languages of many different countries, as well as familiarity with local customs, traditions, business, and financial habits. Failure to take local preferences, packaging, branding, and economic infrastructure into account can lead to poor strategic decisions. A global perspective implies a holistic view of the inclusion of the workforce through which all employees are treated fairly and

receive equal opportunities and rewards. Basically, it is about creating the synergy of people, where the result is greater than the contributions, due to the strategic coordination of a diverse and pluralistic workforce.

### 3.2. Integrating innovation as a factor of entrepreneurship development

Entrepreneurship in the new economy depends on the level of innovation in a persistent and deliberate way which is why the concepts of innovation and entrepreneurship are closely linked. GEM evaluates innovation in entrepreneurial activities, analyzing the extent to which entrepreneurs introduce products that are new to a segment of customers, or entirely, and at the same time, are offered by the competitors. As might be expected, average levels of innovation increase with the level of economic development or, in other words, more intense innovation activities contribute to increased competitiveness, leading to sustainable development measured by GDP per capita. As an example, in the table below we remark that entrepreneurs in innovation-based economies are on an upward trend, with a third (31.2%) in terms of their products being new on the market and in the corresponding industries, followed by 23.1% among entrepreneurs with innovative products in economies based on efficiency and 21.0% on economic factors. Compared to 2017, these statistics remained unchanged in 2018.



**Figure 1:** Development phase environments for innovation levels (percentage of TEA with new product and without competitors) in 54 savings, GEM 2017, Source GEM-Global Report 2018/2019

There are several reasons for the consistent finding that levels of innovation are linked to the level of economic development. The developed economies tend to have higher levels of intellectual property protection, and academic education is more readily available. Moreover, a larger proportion of the workforce participates in sophisticated industrial sectors, such as information and communication technology (ICT), as well as the professional and other services industries.

Research conducted by GEM shows that the intensity of innovation is the lowest in Latin America and the Caribbean (22.9%) and the highest in North America (39.6%). According to figure no. 2, in individual economies, the highest levels of innovation are reported by Luxembourg at 57.1%, Chile at 54.0%, and France at 48.6%. Chile and Luxembourg maintained their leading position in this category one year before and France advanced. The lowest innovation rates are measured in Panama at 8.5%, Bosnia and Herzegovina at 10.9% and Indonesia at 11.6%. Several economies show an encouraging trend of relatively high TEA rates associated with robust levels of innovation. Lebanon is a relevant case in this respect, ranking fourth in the overall GEM sample for both the TEA and the innovation level (and ranked first for the business ownership rate).

**Table 1:** Level of innovation for TEA by region, GEM 2018 - Percentage of TEA

Region	ECONOMY	Innovation (product is new to all or some customers and few/no businesses offer the same product)	
		SCORE	RANK/54
Europe	Bosnia and Herzegovina	10.9	53
	Bulgaria	13.4	50
	Croatia	19.9	40
	Cyprus	40.9	7
	Estonia	30.2	12
	France	48.6	3
	Germany	23.7	35
	Greece	26.4	25
	Ireland	42.7	6
	Italy	28.2	21
	Latvia	28.4	20
	Luxembourg	57.1	1
	Netherlands	22.5	37
	Poland	12.1	51
	Slovakia	29.2	17
	Slovenia	34.2	10
	Spain	25.0	32
	Sweden	29.1	18
	Switzerland	24.9	33
United Kingdom	27.1	23	
	TOTAL	28.7	
North America	Canada	43.2	5
	USA	35.9	9
	TOTAL	39.6	

Source GEM-Global Report 2018/2019

### 3.3 Implementation of technological innovations

The role of information technology in the new economy is essential in the process of changing the structure and international production. The new technological infrastructure has enabled the services to be disconnected from production and to be marketed or performed remotely. In this contemporary place, for a growing number of internationally integrated but geographically dispersed business enterprises, the market is global, not national or regional, and the internationalization of production is imposed by the economy of profitability. In other words, the high cost of information technology and highly skilled labor used in the production process requires a niche that responds to a global market rather than a national market.

### 4. Conclusions

Entrepreneurship affects economic growth in many ways. Through entrepreneurship, important innovations enter the market, innovations that lead to new products or production processes that ultimately increment efficiency by increasing competition in that specific market. The ideas and concepts that emerged due to entrepreneurs' involvement, upsurge our knowledge about the entrepreneurial ecosystem. At the same time, we can easily learn about consumer behavior and their product preferences, by introducing new variants of products

and services along with those already placed on the market. This situation accelerates the innovation of new products as a result of many hours of work and the practical transposition of the creative character of entrepreneurs. The entrepreneurial capacity of an economy is the determining element of economic growth and productivity improvement. Consequently, knowing the determinants of entrepreneurship is the first step in establishing and implementing entrepreneurial policies and subsequently calculating their social and economic impact. Globalization, innovation, trade liberalization, the information and communication technology revolution are the main features of the 21st-century economy, creating a proactive approach to the development of global entrepreneurship.

Entrepreneurship in the new economy depends on the level of innovation in a persistent and deliberate way. The integration of innovation has become a constant goal for economic efficiency from the global to the local level. Entrepreneurship changes the direction of the national economy of the countries. The well-being of a society depends on the level of entrepreneurship within it. Lack of natural resources or capital does not directly lead to stagnation or even the decline of welfare, the main factor being the lack of an entrepreneurial environment that stimulates development involvement and initiatives. Entrepreneurship is essentially concerned with creating well-being through the production of goods and services. This leads to an upward process of change in which a country's real per capita income rises above average or, by way of explanation, economic development takes place. Therefore, the evolution of entrepreneurship is the fundamental element of global economic progress.

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## BUSINESS MODELS, BUSINESS STRATEGY AND INNOVATION

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**Abstract:** *The concept of the business model is destined to find realization, applicability and practicality in many aspects in the economic sector of entrepreneurship. The company in its entirety, represents a model framework with an interconnected process structure, essential for revenue generation, allocation and absorption. When a business enterprise is initiated, it inevitably needs to implement a defined business model. The redesign of business models runs parallel to technological trends. As a result, the comprehensive study aspects in the economic sciences confront the researcher permanently with the tests of change. Technological evolution defines imperative and indispensable trials for entrepreneurs. Constantly companies in a way, are traders of ideas and creations through their business models. The novelty of this study comes from conducting an analysis of business models in the spirit of compromise with technological evolution. The purpose of this paper is to advance far-sighted research on sustainable innovation in the business economic sector, giving a new perspective to the business model.*

**Keywords:** business models; technological innovation; innovation process; implementation of new technologies; performance; technological improvements.

**JEL classification:** M15; M16

### 1. Introduction

Nowadays businesses are constantly confronted with changing processes over time, specifically in the last decades of the digital age where designing, operating and adapting a business model, remains one of the key current issues facing the management of organizations. Companies tend to be unique and are constantly exploring for unique business models that have the potential to positively enhance their competitive performance in the market.

The management of an enterprise in the global economy, has become increasingly difficult in recent years through the application of new technologies and is felt in all economic sectors, in all enterprises, of all sizes. Entrepreneurs tend to focus on the market, the growing demand for social responsibility, products, the diversity of consumer tastes, and the unprecedented growing competition in the market, inadvertently avoiding attention from the company's internal organizational framework. Selecting a business model is an important step when starting a new business because only through a business model, the entrepreneur can see the fulfil and the realization of the idea. Through the nomination and implementation of a business model, is possible for entrepreneur to create an efficient business structure. It is an important mechanism to pay attention to the financial, budgetary

and operative activities of the company and a key tool for start-ups in the entrepreneurship sector (Amit et al., 2012).

The business model is a dynamic instrument, which is constantly adapted in the spirit of creativity, serves to evaluate the realization and practice of the idea, to set improved objectives, to help evaluate the performance of the business, to redesign the processes, the purpose of establishing the business and, consequently, to compare its progress. A business model should be comprehensive, easy to understand, workable, and able to indicate that the business will be able to support the entrepreneur. Motivation of initiatives taken, decision support, correctness, practice and reliability, are vital in a business model. A business model should present how the business activity will be monitored by coordinating the individual roles of the staff or the team work and also being able to show the results compared to the goals. Designing a business model is important because on a large scale it determines the future of an organization. For companies already established, the manifestation of reflection with changes in the business model, highlights where the focus of the entrepreneur should be, based on the goals achieved or the necessary changes required (Wirtz, 2011).

Innovation, as a result of redesigned processes defines a vital element in the analysis of how enterprises innovate, being currently more than ever, the main discussion in entrepreneurial decisions.

## **2. An Overview of Technology as a Business Necessity**

Currently companies around the globe feel under direct pressure to operate in efficient solutions, designed to fully adapt the diverse and comprehensive strategic enterprise management activities. Through the application of new technologies and digitalization, businesses must constantly reflect to redesign the business models they use. At present, the success of a business both in the domestic market and in the foreign market is ensured by innovation. Innovation personifies the main positive driver of economic growth in today's global economy (Bruland et al., 2004). Through innovation, companies are becoming more and more active in the unprecedented competition in the market. By innovating, organizations are implementing new strategies that refresh the image of products that are launched to customers. Reconceptualization of the offered products is in the inevitable attention of the managers. The evolution of technology has caused a revolution in almost every aspect of the entrepreneurial sector. Managing a business in the global economy has become increasingly complex in recent decades. Studying the impact of innovation on business models is essential to explore how companies innovate, need and should to innovate.

## **3. Organizational Culture and Innovation**

According to the research results of some authors in the field, organizational culture is considered as a set of values, symbols, rituals, beliefs, assumptions, common perceptions of a group, valuable opinions within an organization. The organizational culture of the enterprise is characterized somewhat more abstract, strong and long-term compared to the organizational climate which in the perception of researchers is related to the day-to-day activities and rules of the organization that tend to change frequently (Jaskye et al., 2005).

The organizational climate consists of internal and daily manifestations of the enterprise, interpersonal relationships in the organizational structure and innovative initiative. Various factors of improvement philosophy, personal motivation, technical skills, acceptance of initiative, creativity, reflection, team work, attraction to complexity, compromise with challenge, manifestation of interest in the unknown are some related elements and driving factors of innovative ideas. These elements give a positive impetus to companies to have a more innovative trend in providing unique services and products. Based on the opinion of researchers, creating the right climate for regulating, orienting and implementing the innovative spirit in an enterprise is essential for the future of the company (Taverner,1 992:22).

#### **4. Electronic Business Models and The Use of Electronic Commerce**

Developing a barrier-free global market and the evolution of technology can put entrepreneurs face unprecedented challenges, but can also provide many opportunities for businesses. The integration of information technology in business. allows new practices in business relationships. The evolution of information systems access and the massive proliferation of internet use, have fundamentally influenced the way businesses do business. Currently, the most successful companies around the world are those companies that rank first for the absorption of innovative capabilities.

The organizations have moved from simple and classical business models, to those that are evolving online. The use of "e-commerce" and "e-business" in developed countries marks an increase in benefits and a drastic reduction in costs. These two terms are different but also interactive in the way they operate. "E-business" includes a more comprehensive range of business activity. "E-commerce" is an integral part of "e-business". They differ from each other because "e-commerce" sells products online from an online store while "e-business" refers to a wider range of doing business online. Through "e-business" people can sell everything in order to earn income from that business. Innovation enables new applications in various forms in business and highlights another type of business organization, that of "e-business". The use of "e-business", in the opinion of entrepreneurs, has a significant positive impact in terms of improving business activity and efficiency, launching new products or services and, in some cases, the restructuring of an entire industry. By implementing "e-business", organizations have the opportunity to improve the services they provide to customers, increase the company's revenue, reduce production costs and bring uniqueness to products (Chaffey, 2007). Companies are constantly redesigning and adapting their processes trying to do the same thing in different ways, in order to increase profitability. Entrepreneurs tend to change the way they do business, in order to be as efficient as possible in managing and directing the activity. Online business is one of the main trends that allows a competitive market due to improved access to communication infrastructure.

#### **Conclusions**

In the era of massive internet proliferation, the acquisition of contemporary views, innovation oriented culture and the leadership of companies in the spirit of compromise with innovation, influences them to improve their competitive

performance in the global market. Once a new business is initiated, it is destined to use and adapt a certain business model that will serve to design the internal organization and value creation for the business. The purpose of this paper is to expand the visionary research aspects, regarding the impact of implementation creativity and innovation on business models. In the end, innovation in business models does not have a strict definition, but it is a constant state of disagreement with the "status-quo" of the entrepreneurship. The analysis shows that the impact and approach of innovation on the economic sector of businesses, puts them ahead of various responsibilities. Naturally, under the impact of technology evolution, businesses need to better reconceptualize internal organizational activities, improve them in relation to time changes, in parallel with new developments and above all deepen them in the managerial organization of work. Therefore, in terms of the orienting culture toward innovation in business models, it is recommended a continuous adaptive manifestation of reflection, conformation and operationalization of some concrete steps in this direction.

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# THE THREE PARTY RELATIONSHIP: INVENTORY LEVEL, DUAL SIMPLEX ALGORITHM AND RETURN ON ASSETS

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**Abstract:** *This paper presents the impact of inventory level on the financial ratio, namely Return on assets. This study is designed to help managers to establish an efficient inventory level to obtain a high ROA, which indicates that company is doing well in managing its resources and can attract more investors. Determining the inventory level that generate a high ROA is possible using Primal or Dual Simplex Algorithm. Primal Simplex Algorithm has some limits in determining the inventory level, so the Dual is preferable. Using Dual, the company can simulate more production process until the optimal stock level is obtained. Also, it can help managers to identify the optimal solution in the shortest time possible and to re-optimize until the ROA has the expected value. Forecasting inventory level, and therefore ROA, has also the advantage that could avoid potential conflict of interest between shareholders and managers. The major limit of using Dual Simplex on determining the inventory level that generate a high ROA is that managers should simulate several times until the optimal solution is obtained. This limit can be removed by using fuzzy numbers.*

**Keywords:** *simplex algorithm, return, assets, liabilities, optimal solution, inventory level.*

**JEL classification:** *C61; G17; G31.*

## 1. Introduction

All companies, either large or small companies, hold stocks. A shop buys stocks from suppliers and hold them until they meet the demand, a factory buys raw materials and uses them in production process; even non-manufacturing or service companies need to hold stocks in order to provide their services to customers. Holding stocks and determining the stock level are important issues in decision process. There are three types of decisions, depending on the time horizon: strategic decisions (long term), tactical decisions (medium term) and operational decisions (short term). Stock level is a:

- strategic issue for decision of building a new warehouse for stocks or shipping them directly to the consumers;
- a tactical issue for decision of how much to invest in stocks;
- an operational issue for decisions about the quantity of the finished goods that should be produced in the next period. Waters, C. D. (2009)

## 2. Short Literature Review

Establishing the inventory level is an important issue, due to the impact that has on the financial performance. There are two different perspectives in the literature: some researchers sustain that there is no relationship between inventory level and financial performance, but others demonstrate the impact of the stock level on the the return on assets (ROA) and other financial ratios.

Chen, et. al. (2005) formulated the idea that lower inventory level does not mean a profitable company, but highest inventory level makes companies perform poorly.

Waters (2009) demonstrates that inventory level has an impact on ROA, considering the formula:  $\text{Net Profit/Total Assets}$ , where Total Assets means:  $\text{Current Assets} + \text{Non-current (Fixed Assets)}$ . He observed that reducing the stock level, current assets will be low, investment in non-current assets will be reduced, and the value of ROA will be high.

Rumyantsev & Netessine (2007) consider that absolute inventory level does not influence the financial performance. They compared the inventory and sale movements: if the inventory moves faster or more slowly than sales, the company will be less profitable.

Basu, N., & Wang, X. (2011) demonstrate that for wholesale and retail industries the relation between stock level and financial indicators is attenuated by the fact that the companies from these industries generally carry low level of inventory.

Reviewing the literature, the question *What levels of inventory maximizes financial performance?* remains, mainly because there is no exact answer to this question.

In this paper, the answer to this question would be offered using Simplex Algorithm; so, the companies would be allowed to find the inventory level adapted to their activity and forecast this level considering both financial performance and operational restrictions (space, time, budget, reorder level, safety stock). Moreover, if the company has a lower ROA after optimizing inventory level, this paper offers the possibility to re-optimize the stock level, until the expected ROA is reached.

## 3. Optimizing Inventory Level Using Simplex Dual Algorithm

### 3.1. Definition and Methodology

The inventory level depends on the production planning and market demand. The market demand is a variable that can be rarely influenced by the company, but the production planning is at the hand of any company. Using mathematical methods, companies can determine the production level considering the beginning stock, the safety stock and the space, time, financial constraints. The most popular method for optimizing production is Primal Simplex Algorithm.

In order to use the Simplex Algorithm, it is necessary to formulate the linear program as a mathematical model. After the formulation of the linear program, there are some steps that should be followed in order to obtain an optimal solution for the linear program. The next step, after modelling the linear program, is transforming the linear program from canonical form to standard form. There are three possibilities:

- Adding slack variables for every inequality from linear program. For  $\leq$  inequality it is necessary to add a slack variable with positive coefficient and for  $\geq$  inequality it is need a slack variable with negative coefficient. In the second

case, there are two different methods of solving the linear program: Big M Penalty Method and Dual Simplex Method.

- Adding artificial variables, if the slack variable coefficients are negative. Then is necessary to use Big M Penalty Method.
- Multiplying the constraints with negative coefficients for slack variables by -1. This form of the linear program can be solved using Dual Simplex Algorithm.

According Keough Gerard & Thie Paul (2011) the next steps for the third possibility is:

- Creating the Initial Simplex Table:
  - o If all  $b_i \geq 0$  and the differences from the last row of the table are positive for maximizing problem and negative for minimization program, then stop: the solution is primal and dual feasible, so is optimal.
  - o If there exists a row on the table such that  $b_r \leq 0$ , and  $a_{rj} \geq 0$  for all  $j$ , there is no feasible solution.
  - o Otherwise, determine the pivot by selecting leaving and entering variable.
- Selecting of the leaving variable
- Selecting of the entering variable
- Updating the Simplex Table and solving the iteration until the solution is optimal.

Dual Simplex Method is also used in re-optimization problems:

- When the right-hand side values of the constraints are modified;
- When the constraints system need a new restriction.

### 3.2. Example

Suppose a manufacturing company X produces 3 products  $A_1$ ,  $A_2$  and  $A_3$  and should optimize its production process in order to determine the inventory level for the next period. The company collects data about its resources and constraints in the Tabel 1, relates them to the objective (minimizing cost) and formulates the mathematical model for the production process.

**Table 1:** The Coefficient's Values of the objective function and constraints

Elements	Criteria	Not.	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>
Objective function	Number of products	$x_i$	$x_1$	$x_2$	$x_3$
	Unit cost	$c_i$	20€	30€	15€
Restriction 1	Production time/product	$h_i$	20'	60'	45'
	Total production time	H	28.760' *		
Restriction 2	The surface/product	$s_i$	30cm	16cm	20cm
	Total surface	S	10.000 cm**		
Restriction 3	The demand ratio/ product	$q_i$	1	2	0
	Total demand	D****	300		
Restriction 4	Price/product	$p_i$	30€	55€	40€
	Turnover	T	25.000 €		

The mathematical model for the linear program is as follows:

Objective function:  $f(x) = 20x_1 + 30x_2 + 15x_3$  - minimize

Constraints:

$$\begin{cases} 20x_1 + 60x_2 + 45x_3 \leq 28.760 \\ 30x_1 + 16x_2 + 20x_3 \leq 10.000 \\ 1x_1 + 2x_2 \geq 300 \\ 30x_1 + 55x_2 + 40x_3 \geq 25.000 \end{cases}$$

Non-negativity conditions:  $x_1, x_2, x_3 \geq 0$

Due to the last constraints with  $\geq$  inequalities and due to the coefficients of objective function (they are all positive – another condition for using Dual Simplex Algorithm), the production program has to be solved with Dual Simplex Algorithm. Using this algorithm, the problem has the following optimal solution:  $x_1=0, x_2=150, x_3=419$ . This means that company should produce only product A<sub>2</sub> and A<sub>3</sub> in order to achieve the minimum cost (=10.781€). This optimal solution indicates the optimal stock level, considering the holding cost (space), the production time and the demand. So, the company should have the following inventory level: 150 pieces of product A<sub>2</sub> and 419 pieces of product A<sub>3</sub>.

#### 4. The impact of inventory level on ROA

Return on asset (ROA) is one of the most popular of the financial ratios. It measures how well available resources of the company are used in order to achieve the highest financial performance.

The formula of ROA is: Net income/Total Assets. This formula has as denominator “Total assets”. Total Assets is the sum of current assets (accounts receivable, inventories, cash) and fixed assets (equipment, plants, lands). There are two possibilities for any company to reduce or increase total assets:

- to increase or reduce current assets through optimizing stocks, contracting or reimbursing credits, investing in short term bonds, treasury bills or other money market funds;
- to increase or reduce fixed assets through buying or selling them.

Optimizing stocks influence both possibilities. Low inventory level frees up cash for other use (reimbursing credits, short-term or long-term investments), so the current assets will decrease. Low inventory level will also bring reductions in IT systems, storage space, materials handling equipment, so the fixed assets will decrease.

If the denominator “Total Assets” is low, ROA will be high, if “Total Assets” will be high, ROA will be low. A high value of ROA means that company uses efficiently available resources to generate income. A low value of ROA means that the inventory management was bad.

##### 4.1. Example

Considering the same company X, its ROA after the production planning from the previous example is:

**Table 2:** ROA for company X

<b>ROA</b>
Net Income = 25.000 € (Turnover) - 10.781€ (Optimal Solution) + 3.000 € (Other income)
Total Assets = 10.781 € (Optimal Solution) + 40.000 € (Fixed + Cash)
ROA = 17.219 € / 50.781 € = 33%

If the company wants to achieve a higher ROA, it should rewrite the mathematical model and modify the elements of the linear program. There are more possibilities: to modify right hand side values of the constraints and use Dual Simplex Algorithm, to add another constraints and use Dual Simplex Algorithm, or to modify the coefficients of the objective function and constraints and use Primal Simplex Algorithm.

In this paper, the first possibility is considered in order to use Dual Simplex Algorithm, which implies less steps in order to re-optimize the linear program. Then, the new mathematical model will have a different value for the right hand side part of the turnover constraint. This means that company wants to obtain a production plan that achieve minimum cost and a higher turnover than the turnover from the first model (> 25.000 €). Thus, the new production model, with modified turnover constraint, will be:

Objective function:  $f(x) = 20x_1 + 30x_2 + 15x_3$

Constraints:

$$\begin{cases} 20x_1 + 60x_2 + 45x_3 \leq 28.760 \\ 30x_1 + 16x_2 + 20x_3 \leq 10.000 \\ 1x_1 + 2x_2 \geq 300 \\ 30x_1 + 55x_2 + 40x_3 \geq 28.000 \end{cases}$$

Non-negativity conditions:  $x_1, x_2, x_3 \geq 0$

Using the dual algorithm, the new model has a different optimal solution:  $x_1=191$ ,  $x_2=54$ ,  $x_3=481$ . Comparing to the first optimal solution, which consider that company should produce only  $A_2$  and  $A_3$ , this solution show that the company should produce all three products in order to obtain a higher ROA. The objective function of the new model is equal to 12.685 €. It can be observed that the minimum production cost from the new model is greater than the first minimum production cost (10.781 €).

The impact of the new inventory level on the ROA can be evaluated on the Table 3, where it can be observed that second ROA has a better value than the first ROA

**Table 3:** ROA and D/A for company X according to the A case model

<b>ROA</b>
Net Income = 28.000 € (Turnover) – 12.685 € (Optimal Solution) + 3.000 € (Other income)
Total Assets = 12.685 € (Optimal Solution) + 40.000 € (Fixed + Cash)
ROA = 18.315 € / 52.685 € = 35%

## 5. Conclusions and Recommendations

Using Dual Simplex algorithm in the production planning problems has some advantages:

- Solve problems with non-standard form of mathematical method, so the company can solve even the most difficult decision problems;
- If the company wants to modify one element of the initial linear program, and therefore to simulate more production plans, in order to compare optimal solutions, Dual simplex has fewer steps and help the managers to obtain the solution in the shortest time possible.

Using linear programming in evaluating the impact of stock level on ROA has some advantages:

- Estimating an efficient production plan, the stock level will be "low, but not too low" and expected ROA will be high. This projection would help managers to evaluate the impact of the production level on the financial ratios and to find the optimal solution that will give good results for financial ratios. Then, investors will invest with confidence, due to the values of ROA;
- Estimating an efficient production program, and therefore high ROA, can attract more investors, more funds, so the financing capacity will increase. This is important for the company, especially when inventory level is a strategic issue (company needs funds to build a new warehouse).

Though it has these advantages, this study has some limits. First, ROA considers the inventories at the level of optimal solution from linear program. It does not consider the difference between production level and sales, which is the ending inventory. That means that ROA can be determined using the inventory level with 0 sales. Second, managers should simulate more times, until the expected value of ROA is attained.

These limits could be removed by using fuzzy numbers. Further research is needed to evaluate the impact of using fuzzy number on the relationship between inventory level and financial indicators. Also, it can be interesting to analyze this relationship, using Multi-objective linear programming.

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## BRIEF OVERVIEW OF SUSTAINABLE DEVELOPMENT GOALS IN ROMANIA

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**Abstract:** *Nowadays, the sustainable development is a topical issue, which concerns both politicians and citizens alike, being included in the National Strategy for Sustainable Development of Romania 2030, as part of European Union's vision of implementation, along with the other member states of the UN Agenda for sustainable development. This paper aims to highlight the situation of 3 sustainable development goals in Romania compared with the European Union and the directions that our country should take in order to achieve as many sustainable development indicators mentioned in 2030 Agenda for Sustainable Development. Even if a positive tendency was illustrated, Romania is still far to achieve European Union average.*

**Keywords:** sustainable development, SDGs, poverty, well-being, education

**JEL classification:** Q01, Q59

### 1. Introduction

Improving living conditions, decentralization, prosperity, well-being and living opportunities for people and places are more and more important in a world of increased inequalities and environmental pressures. Both regional disparities and sustainable development are topical issues nowadays due to the integration of Romania into the European Union. This possible problem is present on all continents, concerning both politicians and citizens alike.

It is expressed that humanity has reached a crossroads. The most essential condition that need to be considered is the sustainability of life, taking into account factors and conditions which will favour this for a long period of time. Sadly, the current trends are more based and give a higher importance to the economic rules rather than the ecological ones, social ones to the economic ones and the accentuation of the ecological ones versus the social ones.

All these tendencies are not at all beneficial due to the fact that the future development of the society needs to balance all three aspects of human development: social, economic and ecological.

We can state, that sustainable development represents a new approach that have risen in the last decades of the second millennium. It is almost obvious that the future of all mankind depends on it, the correctness and speed of its practical implementation being the test stone of our generation.

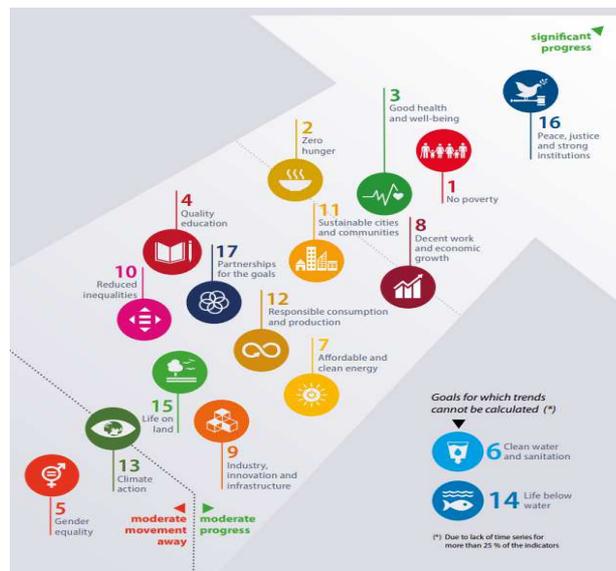
Therefore, the Brundtland Commission (1987) characterize sustainable development as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Considering the above mentioned, it is worth pointing out the 17 Sustainable Development Goal highlighted in the 2030 Agenda for Sustainable Development:



**Figure 1:** Sustainable Development Goals according to 2030 Agenda  
Source: Eurostat

## 2. Sustainable development goals

The 2030 Agenda for Sustainable Development resulted from a long international process of analysis. Changing the perception and consciousness of the remarkable evolution of society, increasing birth rates on a global scale, accelerating the economies of developing countries and social disparities have highlighted the borders of planetary growth. Rising prices for certain resources have highlighted the fact that the Earth can deplete its renewable and non-renewable physical resources, leading to a catastrophic imbalance.



**Figure 2:** Overview of EU development towards the SDGs over the past 5 years  
Source: Eurostat

We chose to speak in our paper about three of the most important SDGs, which in the last 5 years registered moderate progress at the level of the European Union, namely: SDG 1 - no poverty, SDG 3 - good health and well-being and SDG 4 - quality education. To motivate our choice, we thought at our society. The humanity will always seek for a better life, access to a high-performance health system and quality education.

SDG 1 pursues for an end to poverty in all its appearances, including severe poverty. In Romania, there are a lot of citizens at risk of destitution and social exclusion. In 2018, 32.5% of Romanians were at exposure of social exclusion, compared with EU average of 21.6 %. Even if a positive tendency was illustrated, Romania is still far to achieve European average.

SDG 3 seeks to assure health and well-being for everyone by remodeling reproductive, motherly and child health, ending the epidemics of major communicable illnesses, reducing non-communicable and mental diseases.

The situation in Romania is mixed compared with other European countries, in regards with the health of population. The pressure on the healthcare system is increased by the phenomenon of ageing of the population.

Romania, had one of the lowest average life expectancies in the European Union, in value of 75.4 years, compared with a European Union average of 80.9 years. Romania is slightly closing the gap compared to the European Union in the last 2 decades, but still remaining at around 5 years below the average. Female life expectancy at birth is considerably closer to the European Union average than the male one.

Another problem Romania is facing with is the rate of maternal and infant mortality. It is true that both the maternal and infant mortality have a decreasing trend, but the values are still high.

SDG 4 aims to ensure access to fair and decent education through all phases of life. Access to, and attendance in, good-quality education is mandatory for a

community to function accordingly and become sustainable. Education should not be a procedure to be completed prior to entering the workforce. It should be viewed as process through which to prepare younger persons for the threats of the future, and one that continues throughout their lives.

The Romanian education system ranks below the European Union average in terms of performance. According to the latest PISA test result in 2018, 4 out of 10 Romanian pupils don't figure out what they read, 2018 result being lower compared to both 2015 and 2012 results. The average rate of functional illiteracy in Romania increased from 39% in 2015 to 44% in 2018. Among the identified causes of this situation would be: the lack of proper school infrastructure or early school leaving. The rate of early school leaving of 15.3% in 2019, while lower than the rate from the previous years, is still greater than the European Union average of the 10.2% for the same year. Analyzing the rate of early school leaving, aged 18 to 24, there is worth mentioning that there is a big difference between small and large cities. A difference is also observed between poor and more developed regions, such as North-East or South-East region compared with Bucharest-Ilfov region. The risk of early school leaving is greatest among young people from vulnerable groups, such as poor families or ethnic Roma families.

### **3. Conclusion**

According to UNESCO, education for sustainable development is a „key instrument to achieve the SDGs”. This form of education should become an indispensable part of all quality education and implicit to the concept of lifelong learning. If in the last ten years Romania's targets were set in relation to the evolution of the world economy and in line with EU policies, now both Romania and the EU must re-design their medium-and long-term priorities in order to achieve the objectives of the 2030 Agenda for Sustainable Development, adopted at the United Nations Summit in September 2015. This is a sure way that a better future can be achieved for future generations.

The European Union response to the 2030 Agenda is to integrate the 17 SDGs into the Union's public policies, in order to support the global effort to build a sustainable future in collaboration with its partners. The 17 sustainable development goals are already being pursued by many countries of the European Union, and Romania, as a member of this community, intends by this strategy to integrate the objectives of the 2030 Agenda for Sustainable Development.

The government, together with the local administrations should elaborate some new policies of developing the tourism in our country and to try to reach at least some of the sustainable development goals through: restoration of road network, interconnection of the neighboring regions, rehabilitation, protection and conservation of touristic objectives.

Regarding 2030 targets for SDG 1, the main and the most important objective is to eradicate the extreme poverty for all citizens.

Romania's priorities should consist of promoting health education, but especially a healthy lifestyle. In order to reduce the infant mortality and increase the expectancy at birth, our country should modernize public health infrastructure to bring it in line with the European Union standards. Good health and well-being SDG it must be closely related with no poverty SDG, with a focus on rural areas.

In regards with the education, the sole direction that both 2020 and 2030 strategy have is to ensure access to information and quality education, including by improving pupil comfort and the skills-based curriculum. Romania needs a change in order to achieve an education system based on ability and focused on the needs of the pupils, who should enjoy greater freedom in choosing what they study through measures such as increasing the number of optional subjects. It also needs to ensure that students achieve the necessary experience and knowledge to be able to encourage sustainable development, by means of education for sustainable evolution and way of acting, human rights, gender equality, to promote a culture of peace and non-violence, and to appreciate cultural diversification and the contribution of culture to sustainable development.

The limits of this paper can be considered the reduced number of examined articles and a future step of the research can contain an analyze of all 17 sustainable development goals.

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## THE DIVERSITY OF FISCAL POLICIES AND THEIR IMPLICATIONS

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**Abstract:** *Understanding the functionality of fiscal policies, as well as its fundamental role in economic balancing, these are important aspects in terms of protecting and developing the business environment with obvious effects on social life. This study delves into the heterogeneity of fiscal policies to create a delimiting framework for them. The two types of fiscal policies, the discretionary or deliberative fiscal policy and the fiscal policy that act as an automatic stabilizer, were debated and detailed. The characteristics of the two types of policies are offered the way of using government revenues and expenditures as fiscal instruments. Thus, deliberative fiscal policies use instruments in directions strictly defined by the government in the sense of economic expansion or coercion. In contrast, fiscal policies that act as an automatic stabilizer do not require government intervention, acting by increasing the number of payments in times of recession and reducing them in times of economic expansion. Automatic stabilizers operate on the basis of state regulations, although their nature, size and effect have not yet been well defined in the empirical literature. The overall picture obtained in this study by researching the types of fiscal policies has allowed us to understand their functionality and the effects they can produce in the economy.*

**Keywords:** discretionary fiscal policy; automatic stabilizer; expansionary fiscal policy; contractionary fiscal policy.

**JEL classification:** E61; E62; H30.

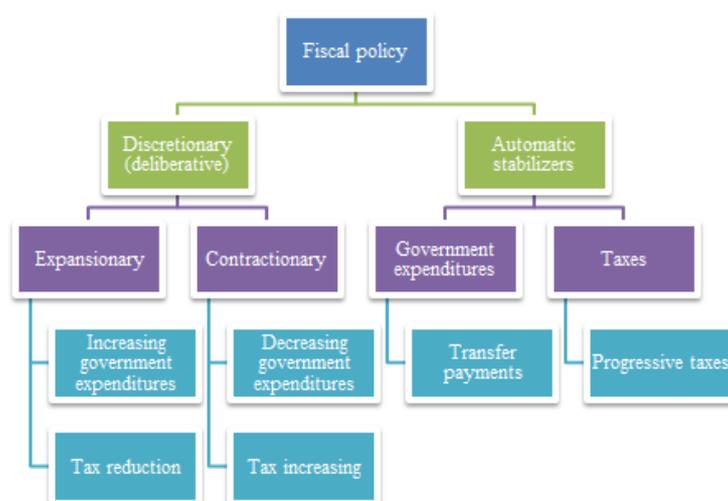
### 1. Introduction

The study of fiscal policy is a desideratum in the context of identifying the particularities that underlie the creation of a fiscal protection against the well-known economic crises. Aspects of the nature of those regarding the reaction of fiscal policies to the fluctuations of the business cycle, the political and institutional determinants, but also the social issues, constitute the interest of the debates and empirical analyzes on this topic. The definition of the concept of fiscal policy has received different connotations, due to its consequences on specific areas of research. A broader definition of fiscal policy has been devised by Bhattarai and Trzeciakiewicz (2017), who argue that it has been used on a large scale over time to stabilize the economy, encouraging the development of societies in a more efficient way, fairer and more equitable. Arestis (2012) frames fiscal policy as an

automatic macroeconomic stabilizer that should be based only on certain instruments to ensure the broad balance of government expenditures and taxation. For a deeper understanding of the types of fiscal policies and an understanding of their functionality related to the phases of the economic cycle, this article is structured as follows: Section 2 Diversity of fiscal policies, Section 3 Conclusions, followed by References.

## 2. Diversity of fiscal policies

Economic stability or instability, the objectives pursued by governments, the degree of economic development, socio-political factors, as well as the phases of the economic cycle, are a series of elements that have been the basis for identifying different types of fiscal policies. Currently, two types of fiscal policies are known, namely, discretionary or deliberative fiscal policy and fiscal policy that acts as an automatic stabilizer, their components being indexed in *Figure 1*.



**Figure 1:** Heterogeneity of fiscal policies

Source: Author processing

Discretionary fiscal policy is classified dichotomously into expansionary fiscal policy and contractionary fiscal policy. The two main instruments of action are government expenditures and taxes that contribute together with other levies to the establishment of government revenues. The impact of discretionary fiscal policy on economic growth was the aim of an analysis by Attinasi and Klemm (2014) in 18 European countries suggesting that the increase in consumption taxes is harmful only during the recession. Expansionary fiscal policy is defined by Hebous (2009) as a stimulus of the multi-effect economy, in which the increase of government expenditures leads to the stimulation of economic progress in a closed economy as well as in a small economy. In Bingyang's (2011) view, it is used as a method of protecting the economy in times of recession due to low macroeconomic performance in which supply exceeds demand. Given the universal objective of

fiscal policies to facilitate economic development, expansionary fiscal policy is presided over by a well-defined mechanism of increasing government expenditures and decreasing revenues in order to stimulate aggregate demand and thus production in times of recession, existing risks of amplifying the inflationary process as a result of a crowding out effect.

Governments will tend to spend more on private sector lending. In turn, it will be affected by a decrease in investment capacity, with government expenditures having a crowding-out effect on private sector expenditures. The need to identify the effects of increased government expenditures on economic development due to the application of an expansionary fiscal policy, has led to numerous studies.

Contractionary fiscal policy is an antithesis of expansionary fiscal policy due to instruments that act as a reverse mechanism to stimulate the economy. Its restriction is due to higher taxes and lower government expenditures. The effect is rapidly visible in the economy due to the reduction in the amount of capital available. Although the measures imposed by such a policy are not sympathetic to the business community and citizens, they ensure a slow but sustainable growth of the economy. Inflationary expectations are much more present than in the case of expansionary fiscal policy because the increase in taxes and fees will result in higher prices and destabilization of living standards. Despite the contradictory arguments brought to the efficiency of the application of the contractionary fiscal policy, this is defined by Neto (2017) as an incentive offered to countries facing a budget deficit. However, there are many limitations to this approach as contractionary fiscal policy is characterized by budget surplus, requiring increased taxes and fees while reducing government expenditures only during periods of economic expansion to avoid expansionary anticipations and facilitate sustainable economic development.

The second type of fiscal policy is that which acts as an automatic stabilizer. Business cycle fluctuations are spontaneously balanced without the need for government or other decision-making. Tools used as automatic stabilizers are government expenditures through the social transfer system and progressive taxes on corporate income or profits. Dolls et al. (2012) noted that the operation of automatic stabilizers play a key role in stabilizing demand and production. In another perspective, they are defined by Eaton and Rosen (1980) in the light of the classical instruments used in fiscal policy, having the role of harmonizing production fluctuations without the need for discretionary action by governments. The automatic stabilizer, which includes the use of progressive taxes, works by setting differentiated rates that are higher where revenues are higher, a result assimilated to periods of economic expansion, and in the event of their decrease during recessions there are also reduced, proportional tax rates with the income obtained. The role of corporate tax, which must act as an automatic stabilizer, was analyzed by Buettner and Fuest (2010) showing that the stabilizing effect is fluctuating over a business cycle and tends to increase during periods of recession. Regarding the role of government expenditures as an automatic stabilizer in the economy, most of the adversities in the empirical literature are focused on transfer systems in the field of social unemployment insurance. They act as a buffer by increasing the number of payments in times of recession and reducing them in times of economic expansion based on a series of state regulations, thus eliminating government intervention in this process.

### 3. Conclusions

Fiscal policy must be applied in order to restore economic balance and reorient towards sustainable development. Its applicability has multiple implications on socio-economic life. Taking into account the etymology of the word discretion, this type of fiscal policy acts as a prerogative recognized by law for a government to take measures to balance the economy. There are a number of differences, both among practitioners in the field and among academics, regarding the effects that expansionary fiscal policy and contractionary fiscal policy have on the economy, as well as on the extent to which they can bring necessary benefits to balance or development without exceeding them. The functionality of automatic stabilizers is positioned in a sphere of uncertainty. Their nature, size and effect have not yet been well defined in the empirical literature. Establishing benchmarks in order to identify their relevance in balancing the economy as a result of cyclical fluctuations can improve the expected projections. Moreover, the clear delineation of the effects produced individually by each automatic stabilizer will help to formulate realistic assertions to be framed in a concrete mechanism in which they work together. Understanding the nature, size and delimitation of their effects will contribute to the normalization of business cycle fluctuations, which currently cause major management difficulties for many governments.

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## METHODS OF INSTITUTIONAL FACTORS ASSESSING AND THEIR IMPACT ON MACROECONOMIC INDICATORS

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**Abstract:** *Institutionalists use a diversity of approaches to point that institutions are a fundamental determinant of differentiation among countries that have a long-term impact on state macroeconomic performance. The list of socio-political factors in the economic literature at both the academic and empirical levels is pretty comprehensive. These include private property, economic rights and liberties, political regime (democracy or other forms of state), independence of the courts, efficient government and the rule of law. Few empirical studies also consider performance indicators from the education and health care systems, social inequality and the shadow economy. Indicators of the form of government, as well as indicators of the rights and freedoms associated with the form of government, are the most frequently used socio-political factor in the economic literature.*

**Keywords:** Institutions; Measuring; Macroeconomic.

**JEL classification:** A1; E1.

### 1. Introduction

The most common method is a study in-depth study of the economic history with different indicators, describes the origins and highlights those institutions that are considered significant. Famous authors such as Morris (2010), Norris (2012), and Hannan (2013) use this approach to investigate the comparative wealth of countries over time. Comparative approach - Matching sets of countries in detail. Acemoglu, Robinson (2012) use a series of "natural experiments" comprising two nearby economies with several geographic characteristics but different histories. They chose the changeable "protection against the risk of expropriation" as the type of institutions in operation. There is a statistical correlation between higher quality institutions, as the explanatory variable, and higher incomes, on the other hand. They studied the origin of changes in institutions in the history that could be used as a mechanism for the current institutional variables in the selected countries. Based on the correlation between existing institutions (expropriation risk) and settler mortality rates, their two-stage regression model explains that national institutions have a significant impact on current income differences between countries. Acemoglu and Robinson launched a new kind of growth regression. Other scientists have applied multilevel regressions and variables, such as Acemoglu and Robinson. For example, Rodrik, Subramaniam, and Trebbi (2002) examine institutional performance along with geographic and commercial variables. These studies prove the fundamental role of institutions in defining differentiation in growth rates among countries. However, the model explains just half of the differences in income between the countries.

## 2. Literature review

Jellema and Roland (2011) study the compounds of institutional variables that have joint impact. They consider legal, cultural and political variables and use individual component study. They found that political institutions of limited executive power and the policy of "check and balance", together with a democratic culture of participation, are necessary for long-term income growth.

The article Butkiewicz J., Yanikkaya H., (2006) conducted an empirical study of the factors of economic growth, including institutional factors. During the analysis, the authors were able to convincingly show a positive, statistically significant impact of the main socio-political factor on economic growth and a relatively weaker impact of the form of government. In addition, the results were found to be highly dependent on both the sample and the estimation method used. The research allows making a number of important conclusions for analyzing the influence of socio-political factors on macroeconomic indicators. First, for many institutional factors, there is no direct quantitative indicator, and instrumental variables are used instead, however, to estimate regression-based on instrumental variables, the method of least squares is often used instead of methods that allow obtaining consistent estimates using instrumental indicators. Democracy in economic research is the most popular socio-political factor of economic growth. However, most of the authors used the rule of law relatively rarely, which increases the value of this review. The article also carried out a correlation analysis of a set of 11 socio-political indicators, based on high correlation coefficients, the idea of reducing the dimension of the set of factors by the principal component method was put forward, several unique institutional indicators were used (for example, ethnolinguistic differentiation in the country), an advanced method was implemented.

If we do not take into account such an institutional factor as democratic rights and freedoms, which is directly dependent on the form of government, the most popular institutional factor of economic growth among economists should be recognized as the level of corruption as a level of theoretical analysis (Dudley, 1987; Tullock, 1996; Bardhan, 1997) and in empirical studies (Mo, 2001, Leitzel, 1997).

In most of both theoretical and empirical articles, the rate of economic growth is the main indicator influenced by institutional factors. With a more detailed analysis of various sources, a number of indicators can be identified that are influenced by institutions:

1. GDP per capita (Acemoglu 2005, 2008).
2. Human Capital (Coe, 2008)
3. Rate of economic growth (Barro, 1996, Dias, 2012).
4. Aggregate productivity of factors (Telbadi, Elmsile, 2008)
5. Investments (Przeworski, 2003, Polterovich, Popov, 2006).
6. Savings rate (Acemoglu, 2005).

A more serious question is what socioeconomic indicators can be used for the experiment. Used indicators of institutional change:

1. Institutional indicators of financial markets.
2. Indicators of the political regime
3. Indexes of freedom according to the Heritage Foundation:
  - 3.1. Financial freedom
  - 3.2. Freedom to invest
  - 3.3. Freedom of trade
  - 3.4. Business freedom

- 3.5. Freedom of property rights
- 3.6. Freedom of economic policy
- 4. Level of corruption indicators:
  - 4.1. International Transparency Corruption Perceptions Index.
  - 4.2. Heritage Foundation's Freedom from Corruption Index.
  - 4.3. The number of registered crimes related to sons-in-law (according to [www.gks.ru](http://www.gks.ru)).
  - 4.4. The number of very serious crimes (instrumental variable for corruption according to Mauro. P., 1995).

If institutions are widely viewed as “the rules of the game”, it would be logical to use game theory tools for analysis. The basic idea is to understand the institution as a state of equilibrium. Moreover, it was explained by many economic models. These models are more or less limited to specific forms of institutions: regulatory organizations, codes of conduct, social conventions, and corruption. The correlation approach is to explore the genesis of an institution as the genesis of a state of equilibrium. According to game theory, for each event that occurs, two main paths of institutional evolution can be considered. The first approach views the institution in relation to a collaborative decision-making process in which it is voluntarily created in a side game to the main game. The second way considers the institution as a system of behavior that is directly acquired by agents in the game and interpreted as an institution. It is divided into two sub-approaches, for which the institution is created either as a result of an evolutionary process (Binmore, 1992). In any case, it is necessary to indicate how the players define and legitimize the once established institution.

The game-theory approach makes it possible to model the process of political control directly through the interaction of political parties by using the characteristics of the game as measures of democracy. Earlier approaches to the research of the economic effects of government offered either only a way to quantify government (Przeworski, 2003), or an analysis of party performance in the context of elections (Downs, 1957).

The lack of consensus on the impact of a democratic form of government on macroeconomic indicators can be explained by the influence on the results of empirical studies of deeper factors, such as protection of property rights, the degree of independence of the judiciary power and the rule of law.

The topic of the influence of institutional changes on the dynamics of macroeconomic indicators is actively developed in different directions. The main direction of research on the influence of institutional indicators on economic variables is to empirically test the direction and sludge of influence by creating regressions. The set of institutional indicators taken into account at the level of regressions is quite large, but rare research goes beyond the construction and interpretation of econometric equations. In some cases, dynamic macroeconomic models have been built that allow us to study the mechanism of the influence of institutions on economic indicators and form the theoretical base of the effects, but this is rather an exception.

### **3. Conclusion**

Measuring institutions is a heavy-duty, without any doubt. Numerous studies prove the influence of institutional changes on the dynamics of macroeconomic

indicators. Empirical studies show a statistically significant relationship between economic growth rates not only with fundamental factors, but also with indicators of the effectiveness of existing institutions. However, authors could not explain the mechanisms of such influence and do not have a proper theoretical background, which could be examined by the regression models. A complex model development should make it possible to substantively explain the impact of institutional variables, as well as make a reasonable choice of the most important directions of institutional development for sustaining economic growth.

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