

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

***Proceedings of the 12th 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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No. 9 - December 2021

Editor-in-Chief: Prof.Dr.habil. Alina Badulescu

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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 77 papers selected from the scientific contributions of the PhD students, presented at the 2021 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 9<sup>th</sup> issue of the journal *Emerging Markets Economics and Business. Proceedings of the 12<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 26<sup>th</sup> of November 2021 online at the University of Oradea, and thus made possible the release of this volume.

Oradea, December 2021

President of the Conference,  
Professor Alina Badulescu

# DO INSTITUTIONS PREDICT NATURE AND FORMS OF ENTREPRENEURSHIPS IN A SOCIETY? EVIDENCE FROM PRISONERS' DILEMMA AND ASSURANCE GAME

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**Abstract:** *Given that most entrepreneurial literature postulates that entrepreneurial spirit is relatively evenly distributed over time and across different places; individuals face social dilemmas of choosing between productive entrepreneurial and rent-seeking activities. This is so because different forms of entrepreneurships have private and social returns in different proportions. For instance, productive entrepreneurships have higher social returns than private ones while unproductive/destructive have the opposite. Employing Prisoners' Dilemma (PD) game in the absence of strong institutions, this study shows that Nash equilibrium is mutual defection in both static and dynamic games, implying that society would be purely full of rent-seeking or unproductive/destructive activities. By converting PD game to Assurance Game through insertion of institutional parameter, the study finds that, depending on the institutional strength, a society would have a combination of productive and unproductive/destructive entrepreneurships. Contextualizing in different social orders, the study reveals that limited access orders would be dominated by unproductive/destructive entrepreneurships whereas open access orders would be predominantly productive entrepreneurship.*

**Keywords:** Entrepreneurships, institutions, Prisoners' Dilemma game, social orders.

**JEL Codes:** L26, D06, C72, P51.

## 1. Introduction

One of the social dilemmas individuals encounter in their daily economic activity is the choice to partake in either productive entrepreneurship or rent-seeking activities, of which the latter is usually associated with higher private returns than the former, though at the detriment of social welfare. The choice is social dilemma because if all the individuals engage in productive entrepreneurships, they are all better off than when both engage in rent seeking activities, as productive entrepreneurial activities boost national output through innovations, job creation and wealth creation. It is again social dilemma because if a particular group of people chooses to engage in productive entrepreneurships while another group partakes in the rent seeking ventures; the latter attract much more private returns than the former, albeit the social returns of the former are higher.

In his seminal paper, Baumol (1990) extended Schumpeterian entrepreneurships by incorporating other aspects of entrepreneurships that are not innovative. In other words, Baumol (1990) using his new typology of entrepreneurship (productive, unproductive and destructive) argued that institutional quality influence incentive structure and individuals, all with an entrepreneurial spirit, allocate their talents into a venture with highest private returns. Murphy, Shleifer and Vishny (1991) corroborate further that market size for the talents, quality of property right institutions and entry barriers into the different markets influence individuals' allocation of talent between entrepreneurships and rent-seeking activity. However, Acemoglu (1995) provides new

perspective in this direction by propounding that payoff structure is endogenous, and that past and current proportions of entrepreneurs and/or rent seekers predetermine the future distribution of the activities. Thus, the endogeneity of payoff structure makes it ineffective for policy actions to influence the reward structure.

The main objective of this chapter is to theoretically prove that introduction of *institutional structure*, which transfer some private returns from rent seeking to productive activity, would guarantee the predominance of productive entrepreneurship over the rent-seeking activity. In view of realities on the ground, the chapter blends the perspectives and seeks to establish that converting Prisoners' Dilemma (PD) game into Assurance Game (AG), by way of introducing institutional structure that selectively punishes where necessary, would pave way for cooperation.

## 2. Prisoners' Dilemma (PD) Game Setups

**Table 1: PD Game**

		Player <i>j</i>	
		Productive (Cooperate)	Unproductive (Defect)
Player <i>i</i>	Productive (Cooperate)	B, B	A, D
	Unproductive (Defect)	D, A	C, C

It is assumed in Table 1 that there exist two groups or players *i* and *j* and they are all faced by two choices of cooperation and/or defection. It is assumed here that a player cooperates by engaging in productive entrepreneurship and, defects by partaking unproductive or destructive entrepreneurships. The payoffs accruing to each strategy are: B stands for rewards for collective cooperation, in which all players are productive; and D is the payoff for *temptation*, that is a player defecting when other player cooperates. The payoff for being sucked is A, whereby a player cooperates but his opponent defects; C is the punishment for collective defection and;  $D > B > C > A$ .

**Table 2: Assurance Game with Institutional Parameter**

		Player <i>j</i>	
		Productive (Cooperate)	Unproductive (Defect)
Player <i>i</i>	Productive (Cooperate)	B, B	$A + \lambda(B-A)$ , $D - \lambda(B-A)$
	Unproductive (Defect)	$D - \lambda(B-A)$ , $A + \lambda(B-A)$	C, C

The Nash equilibrium in both static and repeated game is collective defection (C, C), though it is Pareto suboptimal because it is safer for all the players to defect in the absence of communication. In Table 2, we converted PD game to assurance game by introducing institutional parameter ( $\lambda$ ) to reveal the capacity of enforcement authority to perfectly or weakly move some payoffs from temptation to suckers so that mutual cooperation can be attained. It is sort of selective punishment where defaulting player's gain arising from defection is taken away and dashed to cooperating player. It is assumed here that the parameter lies between +1 and -1, where +1 suggests that

the institutions are excellently strong enough to move all the payoffs that accrued to cooperating player but expropriated by defecting player, which is a typical assurance game. In this regard, enforcement authority brings about mutual cooperation because each player would cooperate as s/he is assured his/her payoff remains intact even if the other player defects. Hence, the economy would be full of productive entrepreneurial activities. When the parameter assumes 0, it then means that the institutions are completely weak and cannot, at all, move any payoff from tempting player to sucked player, which is a typical case of PD game and the Nash Equilibrium is mutual defection, though Pareto suboptimal. Hence, the society would be full of unproductive entrepreneurial activities. Lastly, if institutional parameter is -1, it implies that the institutions are not only weak but also extractive in nature as they further move more payoffs from player who cooperates but being disappointed to defecting player. The Nash equilibrium would still be mutual defection and the economy would be dominated by destructive entrepreneurships.

Given the exogeneity and endogeneity of institutions; the parameter would lie between 0 and 1 in most economies implying a combination of productive and unproductive entrepreneurial activities prevailing in the societies in the short-run and the long-run distribution depends on the direction of institutional reforms. When institutional reforms promote productive activities; then in the future the society would be dominated by productive entrepreneurships with pockets of unproductive ones. Although it is very unlikely for the parameter to take on negative value for the whole society except in war-torn, failed states; it could be negative for some sectors such as natural resources, military, religion sectors, and public enterprises. As established by Kalstad and Søreide (2009), such destructive activities as bribery, banditry and theft are stimulated by resource rents as agents are taken away by cheap monies. It is contended by Coyne, Michaluk and Reese (2016) that national defence is not a pure public good that enhances welfare of generality of people because top military generals have been wanton in siphoning funds for procurement arms and ammunition in many countries including the US. This is possible due to absence of competitive biddings for military procurements.

### **3. Nature of Entrepreneurial Activities in Different Social Orders**

North, Wallis and Weingast (2009) postulate that human civilisation has three different social orders ushered in by the two major (agricultural and industrial) revolutions: *foraging*, *natural states* and *open access*. Natural states, also known as *limited access orders* (LAOs), are societies with restrictive access to essential economic and political opportunities, in which exchanges take place based on personal relationship (“who one is and who one knows”) and patron-client network in a large scale. In contrast, Open access orders (OAOs) are societies structured on impersonal lines, referring to citizenship, and in which every citizen has relatively equal access to all opportunities. It is clear that LAOs have weaker economic and political institutions than OAOs.

Therefore, *basic* LAOs, as a form of social order, is likely to be full of unproductive entrepreneurships because the state supports mainly public organisations using public laws, and such organisations promote rent seeking. Since *mature* LAOs have relatively long-lasting political and economic institutions that reinforce public and private perpetual organisations, they would be pervaded by both productive and unproductive entrepreneurships depending on the degree of their maturity. *Fragile* LAOs may be dominated by destructive entrepreneurships with little unproductive entrepreneurships since their institutions can only support only states per se, thereby spur only rent creation, extraction and deployment. Finally, OAOs would be majorly occupied by productive entrepreneurships as political and economic institutions are



strong enough to support all manners of legal organisations by enacting and adequately enforcing progressive laws and regulations.

#### **4 Conclusion**

The new currency in entrepreneurial studies is that not all forms of entrepreneurships contribute positively to economic prosperity as some entrepreneurial activities are productive while others are unproductive or even destructive as the case may be (Baumol, 1990). It is thus argued further that policy, via influencing returns, can more effectively reallocate entrepreneurial efforts than entrepreneurial spirit, which is relatively evenly distributed (Baumol, 1990, Murphy, *et al.*, 1991). However, Acemoglu (1995) counterargued that policy actions would be ineffective as incentive structure is endogenous, implying proportion of past and current entrepreneurs or rent seekers dictates the future distribution. Employing PD and assurance games, this study proves that insertions of strong institutional structure could be bring a society predominated by productive entrepreneurial activities with some unproductive/destructive ones. Policy implication of the findings is the that the ongoing business policy reforms in most countries should focus on making both political and economic institutions inclusive so that productive entrepreneurships attract many individuals, and in so doing social welfare is promoted.

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## DECENTRALIZATION AND INTEGRATED MANAGEMENT SYSTEM IN LOCAL PUBLIC ADMINISTRATION

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**Abstract:** *The purpose of this article is to describe the principle of decentralization at the level of local public institutions and to present the prospects for redesigning the management system and identifying solutions to implement a strategic and integrated management. In order to achieve the objective of this article, we conducted a case study on the decentralization of hospital care management, namely the role of the Bucharest Hospitals and Medical Services Administration (ASSMB) in the health system in Bucharest, while highlighting the importance of integrated management, the main trajectories and implicitly the importance of involving local public administration in terms of managing public health issues at the local level.*

**Keywords:** local public administration; strategic management; managerial control; decentralization; public institutions; integrated management.

**JEL classification:** H70; I10; I15; I19; M1; O10; P40;

### **The principle of decentralization of the local public administration**

The public service represents, according to the Administrative Code (2019), the activity or set of activities organized by a public administration authority or by a public institution or authorized / authorized or delegated by it, in order to satisfy a general need or a public interest, in particular regularly and continuously.

The transfer of administrative and financial competencies from the level of central public administration to the level of public administration from the administrative-territorial units, together with the financial resources necessary for their exercise is achieved through the decentralization process.

According to the legislation applicable at national level, the principles on which the decentralization process is conducted are the following:

- a) the principle of subsidiarity, which consists in the exercise of competences by the local public administration authority located at the administrative level closest to the citizen and which has the necessary administrative capacity.
- b) the principle of ensuring the resources corresponding to the transferred competencies.
- c) the principle of responsibility of the local public administration authorities in relation to their competences, which imposes the obligation to respect the application of quality standards and cost standards in the provision of public services and public utility.
- d) the principle of ensuring a stable, predictable decentralization process, based on objective criteria and rules, which should not constrain the activity of the local public administration authorities or limit the local financial autonomy.
- e) the principle of equity, which involves ensuring the access of all citizens to public services and public utility.

The specialized literature considers that decentralization translates into a transfer of state-specific attributions to legal institutions distinct from it (territorial or non-territorial), institutions that benefit, under the close supervision of the state, from a certain autonomy of management. (*René Chapus, General Administrative Law, 2001*) It is also considered that the attributions or competencies transferred through decentralization are only of an administrative nature, the public persons who have them benefiting from relative autonomy of decision at local level. (Michael Verpeaux, Law of local authorities, 2005)

Therefore, the doctrine states in principle that decentralization involves the transfer of powers and competencies from the central structures to the public administration in the administrative-territorial units, the former still exercising minimal control over the latter.

At the level of local public institutions, the mayor may delegate, by order, the attributions conferred by law and other normative acts to the deputy mayor, general secretary of the administrative-territorial unit / subdivision, heads of functional departments or staff of the specialized apparatus, public administrator, as well as and the heads of public institutions and services of local interest, depending on their competencies in the respective fields. The local council has the attribution to decide the establishment or reorganization of institutions, public services, companies, and autonomous administrations, in accordance with the law. Thus, the relationship of subordination between local public institutions arises and implicitly the need for an integrated management at the level of these institutions.

In order to achieve an integrated management at the level of public institutions, an organizational strategy is needed to allow the implementation of relevant courses of action, the results of which, over time, can lead to the fulfillment of strategic or fundamental objectives set by the management of the higher institution.

The concept of organizational strategy defines the set of major long-term objectives of the organization, the main ways of achieving, together with the allocated resources, in order to obtain the competitive advantage according to the mission of the organization. (*I Verboncu, O. Nicolescu, Fundamentals of organization management, 2008*)

For the practice of an integrated management at the level of public institutions, the implementation principles, and the reasons for the existence of the strategy are the same. If in private management, the competitive advantage is differentiated by quality or lower prices, in the case of public management it should preferably highlight both situations, so that the quality of services provided to citizens is at the highest standards, with a budgetary effort from the public administration as little as possible.

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### **Case Study: Bucharest Hospitals and Medical Services Administration and its Subordinate Sanitary Units**

Starting from the decentralization process, the Ministry of Health sent to the local public administration authorities of the Municipality of Bucharest, the sanitary units with beds and with them the transfer of responsibility and competence through the approval of GEO no. 162/2008 with the subsequent amendments and completions and of the subsequent normative acts given in its application.

In order to operationalize this transfer, the General Council of Bucharest approved the establishment of ASSMB, a structure of Bucharest City Hall, in order to ensure the management of healthcare in medical units with beds taken over by Bucharest city hall from the Ministry of Health, establishing the role and place of ASSMB.

The public sanitary units currently subordinated to ASSMB, are the following:

"St. Mary's" Clinical Hospital;

"Philanthropy" Clinical Hospital;

Clinical Hospital of Oro-Maxillo-Facial Surgery "Prof. Dan Theodorescu";

"Dr. Carol Davila" Clinical Nephrology Hospital;

Colentina Clinical Hospital;

"Dr. I. Cantacuzino" Clinical Hospital;

Clinical Hospital of Orthopedics-Traumatology and Osteoarticular TB "Foişor";

"Dr. Ion Stoia" Clinical Center for Rheumatic Diseases;

"St. Stephen's" Pneumoftiziologie Hospital;

"Nicolae Malaxa" Clinical Hospital;

"Dr. Victor Gomoiu" Children's Clinical Hospital;

"Dr. Victor Babeş" Clinical Hospital for Infectious and Tropical Diseases;

"Colţea" Clinical Hospital;

"St. Luke's" Chronic Diseases Hospital;

The Clinical Hospital "Prof. Dr. Th. Drills";

Clinical Hospital of Obstetrics and Gynecology "Prof. Dr. Panait Sârbu";

The Clinical Hospital of Psychiatry "Prof. Dr. Alexandru Obregia";

Center for Evaluation and Treatment of Toxic Addictions for Young People "St. Stelian";

Titan Psychiatric Hospital "Prof. Dr. Constantin Gorgos".

The structural organization of the ASSMB was designed in such a way as to allow an efficient framework for the administration of medical services in Bucharest, in for the 19 hospitals under administration.

In order to develop an integrated strategy for the ASSMB and the health units under administration, the manner in which the development strategies at the hospital level are proposed, substantiated and approved, as an autonomous legal entity, must also be taken into account.

In this sense, the Medical Council, of each hospital, is the management structure that must be involved in the elaboration of the development plan of the hospitals throughout the mandate, to establish the directions of strategic nature, regarding the objectives that can and must be assumed by the hospitals. , the necessary resources and realistic deadlines that can be imposed, specific to each hospital.

In order to achieve an integrated strategy for ASSMB and health units under administration, it is recommended that ASSMB representatives organize working meetings with these organizational structures at the level of each hospital.

The main elements that can be the basis of an integrated strategy:

### **Financial Management**

As public funds are the main source of sustainable funding for healthcare, the financial management system, meanings the institutions, policies, and processes that govern the use of public funds in the financing of hospitals - plays a key role. A strong financial management system can ensure larger and more predictable budget allocations, reducing fragmentation of revenue and financing flows, timely budget execution and better financial accountability and transparency. Public financial management is the set of rules and institutions that govern all processes related to public funds. It provides the public sector with a platform for managing resources from all sources and from all areas at national and sub-national level. In this context, the set of rules, procedures, information, and financial flows between ASSMB and the hospitals in the administration can represent an integrated financial management system.

### **Public Internal Audit**

The role of the internal audit is to evaluate and provide a substantiated and objective assurance to the general management on the degree of functionality, both on the whole internal managerial control system and on each concrete form of its manifestation, according to the methodological and procedural framework and recognized practice in the field.

Thus, an integrated public audit system would help the public entity, in this case, ASSMB, to achieve its objectives through a systematic and methodical approach, to evaluate and improve the efficiency and effectiveness of risk management, control and governance processes.

### **Internal Managerial Control**

In the context of the general principles of good practice found in Community legislation, internal control is assimilated to a broader meaning, which is seen as a managerial function and not as a verifying operation. By exercising the control function, the management ascertains the deviations of the results from the established targets, analyzes the causes that determined them and orders the corrective or preventive measures that are required.

### **Centralized Procurement**

The centralization of procurement starts from the premise of the pronounced trend of aggregation by public procurers, in order to obviously achieve economies of scale. The economies of scale that can be achieved in centralized procurement come from the possibility of lowering prices, but also the costs of transactions and procurement procedures.

The advantages of centralized procurement as an integrated management tool in the relationship between ASSMB and subordinated health units are the following:

- ensuring continuity in the purchase of products / works / services;
- better control over prices and their changes;
- ensuring common quality standards for the requested products / services / works;
- achieving economies of scale, due to obtaining the corresponding price reductions depending on the volume of products required;
- reducing the costs of organizing procedures at the level of hospitals under the administration of ASSMB, as contracting authorities;
- a much more efficient management of the financial resources allocated by Bucharest City Hall for the operation and development of the hospitals under administration;

at the level of healthcare management in Bucharest, the management component of the procedures and human resources involved in the public procurement process is improved and optimized;  
elimination of a whole series of problems found over time by the control authorities at public institutions regarding possible frauds and acts of corruption (eg: improperly prepared specifications, wrong products and services procurement's codes, contracts to the detriment of health units and to the advantage of private entities, the inferior quality of the purchased products), which can thus be avoided through the centralized public procurement mechanism;  
greater transparency can be ensured in informing citizens about how public money is spent.

## **Conclusion**

By virtue of the fact that ASSMB is the secondary loan officer for the 19 subordinate hospitals and that its primary objective is: "ensuring an efficient and effective management in the public health units for which the care management has been transferred, according to O.U.G. no. 162/2008 with subsequent amendments and completions", the extension of the internal managerial control represents a set of management principles, implemented by the managers at all levels of the system: ASSMB and public hospitals in administration, to ensure that its objectives are achieved.

Thus, in order to optimize the managerial activity of ASSMB, both in terms of its own activity, but also in relation to the health units under administration, an integrated management system accompanied by an appropriate strategy would support the decision-making act, regardless of the situation.

At the same time, by implementing an integrated strategy, the management team ensures, on the one hand, that resources are obtained and used efficiently in achieving the organization's objectives, and on the other hand that the objectives set at the planning stage are more likely to be achieved, resulting in the fact that all components of the organization operate in a manner compatible with organizational policies.

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Government Decision no. 1567/2008 on the approval of the List of public health units with beds for which the management of health care is transferred to the local public administration authorities and to the Bucharest City Hall, as well as the criteria underlying this transfer (hereinafter referred to as "GD 1567/2008")

<https://assmb.ro>

# THE IMPACT OF MANAGEMENT STYLES ON THE PROCESS OF IMPLEMENTING ALTERNATIVE ASSESSMENT METHODS IN A HIGH SCHOOL IN ISRAEL

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**Abstract:** *This paper deals with the topic of my doctorate, that I want to research: "The impact of management styles on the success of alternative assessment processes in high school in Israel".*

*The article presents one model out of many, which guides different management styles and also reviews the issue of alternative assessment, which is considered an innovative method in the Israeli education system. This area of alternative assessment has gained significant momentum in the last two years following the Covid-19 epidemic.*

*The article presents a variety of tools that can be used as part of the alternative assessment in high school.*

*The school principal and the teaching staff have great flexibility in selecting and adjusting each tool from the list offered to each student according to the differences that exist between the students.*

**Keywords:** alternative assessment; management styles

**JEL code:**

## **Generally Introduction**

Principals and teachers in different school who participate the alternative teaching and assessment process are characterized by different management styles from each other. Each management style dictates the teaching and assessment methods within the great flexibility in the field of alternative assessment that allows each teacher to choose different tools according to his best understanding and according to the student population composition and diversity in his class. There are several known models dealing with different management styles and refer various aspects in this field (Birnbaum, 2007).

Different management styles directly affect the success of alternative assessment processes in high school.

In my research we will examine different management styles of principals in high schools in Israel, and will examine the connection between the management styles and the alternative assessment process and its success level.

## **The research goals**

The research will examine the connections between various management styles, and the alternative assessment process success in high school and offer guidelines and recommendations to action plan aimed to adapt the leading management style to the alternative assessment framework. These recommendations will enable to develop among principals the management skills appropriate for the alternative assessment system.

The research is relevant to the whole education system, from elementary classes to high school.

The research is aimed to assist in delineating regulated plan for managing an alternative assessment system, so this system will fulfil its original target, i.e.: making it as adapted as possible to each student and develop the various skills, consider the processes and not only the results, integrate as diverse teaching and assessment approaches as possible, not as currently as a local means aimed only to improve the student grade.

The subject is relevant and important for the school management and the teacher staff for improving the implementation of alternative assessment processes.

The research will respond the current situation in which unsuitable management styles are integrated in the alternative assessment process in high school and reduces the process efficiency.

Insights from the educational field

In my personal knowledge as a teacher in the state and private education system, I have experienced and still experiencing the problem of managing alternative assessment system. Quite a few principals use management styles that only partially or not at all suit alternative assessment application in high school. This situation does not enable optimal realization of alternative assessment principles.

These management styles also make many teachers to perform tests and summative assessment in the learning part called "alternative assessment", although it is against the alternative assessment method principles. The few teachers who do apply the approach, do not use enough teaching methods and assessment tools out of the large supply existing. This situation requires a significant reform.

In order to perform this reform, we first have to identify the failure points and outline as diverse lines and solutions as possible, in order to adapt the management style to the alternative assessment method principles.

### Literature review

4.1 Professor Ichak Adizes, one of the important management experts in the last forty years, built a model that include optional profiles of managers and / or functions in organizations using four qualities they should have – and through them the organization and its culture – in various doses, which he called PAEI styles.

Table1: Management styles according to Adizes

To do the things in the right way	To do the right things	
A - Administrative	P - Producer	Short term
I - Integrator	E - Entrepreneur	Long term

Source: <https://www.adizes.com>



"Organization at its best" is supposed to maximize all four qualities through proper staffing of its senior management (Adizes, 1978, pp. 16-17) (Adizes, 1999, pp. 130): The first quality is marked with the letter P for Producer – dedication to the mission, ability to remove obstacles on the way to achieve the goal, tireless diligence and goal-oriented. Emphasis on labor division, and the performed activities.

The second quality is marked with the letter A for Administrator - bureaucracy and organization, caution, order, efficiency, systematicity, thoroughness and conservatism, which regulates processes in a calculated manner, streamlines and order "by the book". Emphasis on handling details, and how things are done, idealizing past actions at the expense of present needs.

The third quality is marked with the letter E for Entrepreneur - entrepreneurship, creativity, risk-taking and a comprehensive organizational vision that governs innovation and creativity, and ability to identify future customer needs. Emphasis on bringing enthusiasm, charisma and emotion to the organization; Tendency to see crises as opportunities, focus on the next and different and not in the present, and inconsistency in decisions.

The fourth quality is marked with the letter I for Integrator - Integration and formation of employees, attention and sensitivity to needs of factors in and outside the organization; Ability to find a balance between the organization needs and the employee needs. Emphasis with consensus and compromise.

We cannot change who we are (our personality), but we can improve, we can learn, we can communicate and work together to refer better to people who are different from us.

The main idea is not to change people's leadership style - for example, make an E or P type person to an I – but to enrich a person, make him grow, enrich his management style, not change it. Only those who want to grow and be better will succeed in this process (Adizes, 2019).

4.2 Alternative assessment is a term refers to how the educational framework evaluates the studying individual (Birnbau, 1993).

This assessment is called in the professional language "alternative assessment" since it is an alternative to the traditional and accepted assessment – the test.

The traditional assessment through a test does not measure the student's ability to apply but usually the ability to remember the material and cast it in a structured answer. Alternative assessment is a comprehensive term to additional assessment means. Alternative assessment examines the students' ability to implement the knowledge, skills and understanding they have acquired under the determining conditions of the "real world" outside school (Birnbau, 1997).

The alternative assessment is based on the assumption that in a multi-cultural society and in a class with many intelligences and thinking styles there is a great variety between the students and we cannot evaluate the whole class in a single assessment method (Hacohen, 1999).

The alternative assessment is integrated in the teaching process. The assessment is performed during learning rather than in its end.

The alternative assessment measures academic and cognitive abilities – but not only. Using alternative assessment emotional, social and interpersonal aspects in each student's profile may also be measured.

The alternative assessment evaluates learning products and learning processes. Progress, reflective and critical ability, meta-cognitive thinking and more may be evaluated by alternative assessment.

Alternative assessment is performed by various factors in the educational framework: the teacher, the student, peers, external specialists etc. (the evaluators' identity).

Examples of alternative assessment (assessment tools):

Writing research paper

Performance tasks

Portfolio

Game preparation

Game production

Project Based Learning (PBL)

Model building

There are diverse alternative assessment possibilities. Assessment tasks may be adjusted to the multiple intelligences (Harpaz, 2021).

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# THE FUTURE OF TOURISM: AN EXAMINATION OF THE IMPLICATIONS OF AUGMENTED REALITY AND VIRTUAL REALITY

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**Abstract:** *Augmented Reality and Virtual Reality are progressively utilized in the tourism industry in order to attract and retain potential customers. However, there is a scarcity of academic research on the implications of Augmented Reality and Virtual Reality in tourism. Therefore, the aim of this paper is to address and explore the concepts of Augmented Reality and Virtual Reality in relation to the tourism industry. A subsequent objective is to inform upon the necessity of enforcing Augmented Reality and Virtual Reality as well as providing recommendations for tourism suppliers intending to implement the two new technologies in praxis. Hence, the findings of the present research will not only advance the existing literature but will also prove of great expediency for CEOs, middle-management and tourism organizations in general.*

**Keywords:** Augmented Reality (AR), Virtual Reality (VR), tourism, future, technology

**JEL Classification:** Z32, O33

## 1. Background

Augmented Reality (AR) and Virtual Reality (VR) are considered to be the most important and world-changing technologies of the century (Nayyar et al., 2018). AR and VR technologies are centered on presence, a sense of being there and on the notions of immersion and involvement into the environment (Schroeder, 2002, p. 4). Moreover, AR and VR are experimentally utilized in tourism by different suppliers and professionals with the highest budgets. In the medium-term, AR and VR are likely to be adopted by most tourism suppliers as an adjacent communication medium, whilst in the long-term, AR and VR have the potential to transform the tourism industry. The present research uncovers the implications of new technological advancements and uniquely incorporates AR and VR in the discourse on their potential value over the tourism industry.

AR and VR are expanding from expensive and fully immersive technologies to free software and downloadable applications. This expansion together with the implementation of several successful AR and VR experiments into tourism industry, calls for an abundant study of the emergent territory placed at the intersection between new technologies and tourism. The aim of the hereby work is to aid tourism elites and hospitality professionals in understanding the promise of AR and VR and to adequately prepare them for incorporating both AR and VR into their business strategies.

## **2. The Concept of Augmented Reality**

AR is considered to be one of the most progressive technologies created recently (He, Wu and Li, 2018). This technology has a unique capability to administer the real environment by incorporating it in computer-generated content (Han, tom Dieck and Jung, 2019). AR can develop education (tom Dieck and Jung, 2017), present only information directly related to customer's preferences (Kounavis, Kasimati and Zamani, 2012), strengthen interactivity (tom Dieck, Jung and Han, 2016) and upgrade both entertainment and engagement throughout industries (Xu, Buhalis and Weber, 2017).

AR is a technology enhancing the real world with digital materials, such as 3D models and videos, overlaying in real-time the camera view of one's smartphone, tablet, PC or connected glasses (Augment, 2018). AR has been successfully utilized in the tourism industry by Kuoni Travel together with Aurasma to increment the agency's sales by developing AR commercials that aided to the promotion of their products and services (Hassan, Ekiz and Dadwal, 2018). Similarly, Marriott elaborated an AR application to present their most luxurious resorts, permitting customers to delve into areas they might not have considered (Taylor, 2018).

From the successful implementation of various AR projects, it has been only natural for tourism elites to gravitate towards VR. Overall, it becomes clear from the literature that developments in technology have had an immense impact on tourism and have been adopted to the best of abilities by numerous entities from the tourism industry open towards innovative concepts. The milieu is thus prepared and accustomed to gradually embracing novel concepts and VR will surely make a significant addition to the spectrum. He, Wu and Li (2018, p. 129) highlighted that "adopting AR and VR in the tourism context can enhance consumers experiences, improve their attitude, and increase positive behavioral intention".

## **3. The Concept of Virtual Reality**

Although the terminology has several understandings, VR is to be hereby comprehended as "a computer-generated display that allows users to have a feeling of being present in an environment other than the one they are actually in and to interact with that environment" (Schroeder, 2002). VR describes a three-dimensional, computer-generated environment, which can be explored and interacted with by a person. The person, often through an avatar, is immersed within this virtual environment (Barnard, 2018).

According to Barnard (2018), VR experiences ought to be believable, immersive, computer generated and interactive. According to Lacoma (2018), VR can presently be categorized into non-immersive, semi-immersive and fully immersive. Fully immersive VR experiences are entirely digital environments that can be explored whilst non-immersive, such as virtual windows do not diverge from real life; Semi-immersive VR simulations use a combination of digital and real-world objects to replicate an experience (Lacoma, 2018). A further categorization is into application-based VR, originating from an application and web-based that entails opening the experience through the computer browser (Barnard, 2018).

Even though VR is known for its application in gaming, it has in fact a multitude of other successful applications from engineering to entertainment or recruitment. From trainee fighter pilots to numerous medical applications, VR is currently revolutionizing a plethora of industries, becoming vital for the further development of the tourism industry (Barnard, 2018).

#### **4. Positive and Negative AR and VR Attributes**

Prior research illuminates that technological developments impact the demands of society. In turn, tourism suppliers need to constantly adapt and adjust to technological developments by refining the overall approach, adding specialists to their team, acquiring skills in congruence to the technology and becoming early-adopters in order to harness the power of new technology. Presently, that relationship needs to be shifted towards experiencing – an undeniable advantage offered by AR and VR.

The clear advantages of using AR and VR in several domains of the tourism industry include the creation of unique, richer and more immersive experiences (Tussyadiah, Jung and tom Dieck, 2018), the improvement of customers' engagement (Jung, Chung and Leue, 2015), the increase of visitor numbers (Cranmer, tom Dieck and Jung 2018) and the creation of more personal products and services (Kounavis, Kasimati and Zamani, 2012). The internet has extended the public sphere in terms of communication and AR and VR will enhance it even further. With their emersion possibilities, AR and VR may drastically reduce disengagement. Similar to the other technologies, it permits instant dissemination and allows for multi-channel orientation. Besides, AR and VR tolerate a high degree of control over the message. Additionally, AR and VR experiences increase users' information retention and provide them with an improved sense of connection in regards to tourism related choices.

Alternatively, the first negative aspect of implementing AR and VR is the high production cost associated with the technology being in its experimental phase. Secondly, it is believed that AR and VR are constrained by internet networks. Yet, 5G networks are in the process of being implemented worldwide, bringing to AR and VR users faster speed, shorter delays and increased connectivity (New York Times, 2018). Thirdly, VR can potentially be used for data collection and for maleficent purposes such as manipulation. There is a lack of accountability ascribed to the fact that the speed of technological developments is ahead of legislation (Holtzhausen, 2016). The development of universal VR protocols is difficult and presently, the industry is managed through voluntary guidelines and standards (IEEE, 2018).

#### **5. Economic Value**

According to Jiang and Kim (2015), the economic value is given by the total cost involved in implementing technological innovations, clearly establishing if those innovations are worth investing in. AR and VR are thought to be unique selling points which could lead to an increase in sales (Cranmer, tom Dieck and Fountoulaki, 2020). Moreover, AR and VR “could help tourist suppliers sell more expensive holiday options by giving potential tourists an authentic insight through the ability to see destinations and visualize the intangible” (Cranmer, tom Dieck and Fountoulaki, 2020, p. 5).

Krockner and Weinstein (1994) predict that the “will to virtuality” gets an economic boost from a depressed economy. They argue that AR and VR will be widely adopted by the majority of the population and tourist suppliers as the last resort for the indebted individuals, especially during financial crises. The argument follows that AR and VR will produce the experience without adjacent physical costs, which will be motive enough for the population to embrace the new technologies in the long-term. On the other hand, the development of AR and VR projects largely depends on the objectives and budget of the tourism suppliers and entails several stages with additional costs at every stage.

## 6. Limitations

The implementation of AR and VR in the tourism industry is presently limited to developed countries due to the expensive costs of software and hardware, as well as due to the unbalanced user adoption rates between developed and developing nations. The implementation of both AR and VR technologies in tourism is further limited by potential customers, hospitality professionals and sponsors' hesitation. AR and VR may fail in promoting transparency and openness and could cause an alienated customer from real tourism engagement (Koch, 2014).

Moreover, the present paper is limited by its conceptual nature. Both the hardware and software required for AR and VR are in their incipient stages and the selected examples represent experiments. However, the current work is pioneering in presenting an aggregate of instances through which the tourism industry will be impacted by the development of both AR and VR.

## 7. Conclusions

Overall, developments in technology have had an immense impact on the tourism industry and have already been adopted to the best of abilities throughout time. The implementation of AR and VR in tourism depends on adoption rates and overall development of hardware, software and supporting internet networks. AR and VR experiences are much stronger than those formed when watching non-immersive media. Through AR and VR's experiential and immersion capacities, customers are able to enhance the tourist experience to a larger extent. If used adequately, both AR and VR can increase openness, transparency, may counteract disengagement and even revolutionize entire systems.

AR and VR have been found to provide an enhanced tourist experience, as well as create business benefits, securing additional resources, increasing revenues, and decreasing seasonality. Thus, "for tourism suppliers to remain competitive and attractive to modern tourists and address spill-overs, they must explore the value presented by AR and VR" (Cranmer, tom Dieck and Fountoulaki, 2020, p.2). In conclusion, it is recommended for professionals and companies involved in the tourism industry to prepare for AR and VR in order to reap the full advantages of virtuality and to gain first-mover advantage. Otherwise, AR and VR reluctant professionals risk to alienate tourists interested in transformative concepts.

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# ECOTOURISM AND GLOBAL CLIMATE CHANGE IN THE DANUBE CLUSTER

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**Abstract:** Due to its position in Romania, the Danube Cluster is exposed to climatic risks with major impact on the environment. The article describes how each phenomenon manifests itself, as well as how they affect the population. The author analyzed the main climatic parameters, temperature, precipitation from the weather stations in the area in order to identify the main atmospheric risks. It is important to know how these phenomena manifest because they affect the population, the conduct of economic activities and implicitly tourism. Climate change both at the global, national and local levels is proceeding with great rapidity, sometimes people, not being able to keep up with them. That is why we must learn how to cope with them, how to slow their development, all starting from the awareness of the importance of the natural environment and its protection. Ecotourism is certainly an efficient way of carrying out the tourist activities that emphasize the protection of the environment.

**Keywords:** global climate change, environmental impact, Danube Cluster, ecotourism, people.

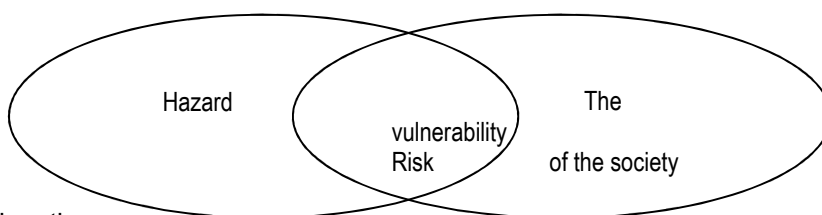
**JEL Classification:** Q01, Q54.

## 1. Introduction

Each scientific paper focused on the analysis of a geographical space, regardless of the degree to which it is carried out, implies the existence of useful results for the population included in the studied area or region. In this paper, I want to present the conceptual delimitations of the notion of risk, the main atmospheric risks existing in the area of the Danube Cluster, as well as how they affect the population and the conduct of economic activities. At the same time, I will present the main characteristics of ecotourism, the way in which it is implemented leads to the protection of the natural environment in the Danube area.

## 2. The risk - conceptual clarifications

Natural risks are understood as events, usually extreme, that go beyond the immediate ability to counteract and adapt to human society. They are possible, probable events, and when they occur they are called disasters (figure 1).



**Figure 1:** Risk notion

By definition, natural risk cannot be understood outside the human relationship with certain events that it cannot control, implying, at the same time, the initiative and the freedom of decision of the human being.

White in 1974 asserted that natural risk presupposes the study of the interaction between man and the environment, governed, on the one hand by natural laws, and on the other hand by the continuous ability of the sociosphere to adapt to environmental changes.

Risks through their mode of action can lead to the manifestation of natural hazards. These are defined as extreme manifestations of natural phenomena, such as earthquakes, volcanic eruptions, prolonged drought, landslides, etc. which can cause significant material damage and even loss of human life.

### **3. Risks manifested in the Danube Cluster area**

The location of the Danube Cluster in the southwestern part of Romania causes this region to be exposed to atmospheric risks with a pronounced environmental impact.

The thermal risks are caused by the general circulation of the atmosphere, the solar radiation and the underlying active surface. During the cold season the risks are generated by the penetration of cold air coming from Russia and Scandinavia, which causes the temperature to drop sharply. Depending on the duration, intensity and when they occur in early autumn or late spring, they can have devastating effects, especially on vegetation and agricultural crops.

In the summer season, the penetration of the continental-tropical air masses from North Africa leads to a massive warming of the atmosphere which favors the installation of prolonged droughts, and their frequency and intensity can cause desertification on certain areas.

In terms of rainfall risks, they are caused by the activity of tropical cyclones in the Mediterranean Sea area that can occur throughout the year. If there are surfaces not covered with vegetation, prolonged rains can lead to the manifestation of mud flows or even torrentiality.

The main atmospheric risks that appear in the Danube Cluster area are: drought, desertification, lightning and thunder, hail, frost and floods.

Drought is a lasting phenomenon in the Cluster region that is characterized in summer by long periods with very low rainfall. It has the effect of reducing the flow of rivers, of the Danube in particular, of water reserves in the soil, the production of moisture deficiency in the air, drying of vegetation and agricultural crops.

Following the analysis of the graph it can be observed that the least rainy month is August due to the high advection of the hot air. This phenomenon has increased in recent times due to the global climate changes that affect including the Danube Cluster. The drought is installed not only during the summer, but also in the autumn, thus affecting the crops, vegetation and water reserves in the soil.

Desertification in the area of the Danube Cluster implies land degradation as a result of prolonged droughts. This phenomenon is also intensified by the anthropic pressure on the environment exerted by overpopulation, improper land use, deforestation, overgrowth and pollution. Fortunately, the Danube Cluster is affected by very small portions of this natural hazard.

Lightning falls into the category of electrometeors characterized by electric discharges into the atmosphere. These occur in the hot season and reach the potential for hazard when they lead to vegetation fires.

The hail is a climate risk phenomenon that occurs during the hot period of the year. This usually occurs in combination with torrential rains, lightning and has major

repercussions on the environment. On average, this phenomenon has a recurrence of 4 days per year.

Frost. The average date of the first frost is represented by the first part of November, and the last frost, in spring, at the beginning of April. The duration of the interval without frost is 200-220 days.

The area where the Danube Cluster is included is included in the southwest climate region, which benefits from the influence of the warmer air masses coming from the Mediterranean and the Adriatic. This has a bearing on the milder climate, with warmer and rainier winters, and quite dry summers. The average multiannual temperatures exceed 11°C, the amplitudes add up to about 25°C, and the precipitation regime is between 600-700 mm / year. The warm air that acts in the perimeter of the Cluster bears the name of Austru with influence on some plants of Mediterranean origin that develop very well under these conditions.

Floods occur, in particular, on the Danube at very high flows. The river passes through a narrowing sector, the Baziaş-Iron Gate Gorge, the longest in Europe (134 km long) in which it has modeled spectacular shapes in limestone, the most known being the Large and Small Boilers.

#### **4. Ecotourism in the Danube Cluster**

Ecotourism or responsible tourism is a way of conducting tourist activities that involves protecting the natural environment. It is important for the Danube Cluster to develop tourism activities in accordance with the principles of ecotourism, because this natural area is of overwhelming beauty and must first of all be protected and subsequently valorized from a tourist point of view.

I performed the SWOT analysis of ecotourism in the area of the Danube Cluster which includes the following aspects:

##### **1. Strengths:**

- the presence of endemic species in a large number;
- different natural resources;
- the existence of protected areas;
- natural areas, untouched by the anthropic intervention.

##### **2. Weaknesses:**

- storage of waste in inadequate spaces that lead to environmental pollution;
- improper management of protected areas;
- deforestation of trees, including within protected areas;
- reduced accommodation capacity in certain localities.

##### **3. Opportunities:**

- the possibility of accessing European funds for the implementation of ecotourism projects;
- increasing the number of tourists;
- promotion of events based on local customs and traditions;
- use of alternative sources of electricity.

##### **4. Risks:**

- the growth of poaching within the "Iron Gates" Natural Park;
- the existence of international competition;
- intensification of pollution with economic development;
- lack of concrete laws for the protection of the natural environment;
- the loss of cultural identity through the lack of concrete actions to protect ancestral customs.

The practice of ecotourism implies a minimal action of the population on the natural components, so the Danube Cluster has the opportunity to develop as an ecotourism destination, being able to become a regional, even national, ecotourism pole.

In Romania there is a National Strategy for the development of ecotourism that has emerged from the desire to economically develop protected areas through responsible tourism, while contributing to the eradication of population poverty.

The national ecotourism strategy shows us the correspondence between the protected areas on the Romanian territory and their potential for tourism development.

Analyzing this cause-effect relationship, we can see that the Danube Cluster area is in an area with large and very large tourist resources. Punctual the region of Boilers shows an enormous tourist potential characterized not only by the special beauty of the natural setting, but also by the existence of anthropic objectives meant to increase the attractiveness of the area: the Face of King Decebal, Tabula Traiana.

At the same time the localities existing on the territory of the Danube Cluster have a high degree of tourist attraction.

Ecotourism is also present in the Natural Park "Iron Gates", an area that overlaps the Danube Gorge. At the level of the natural park, great efforts are being made to promote and develop ecotourism through the following means: the existence of tourist guides on a number of 10 tourist routes. They can organize simple one-day hikes on a single route or they can combine several tourist routes whose journey takes several days. It is also possible to organize combined routes, car and hiking or car and naval that offers the possibility to visit the anthropic objectives existing in the area.

Due to the high degree of attractiveness, approximately 50,000 tourists are registered annually on the Danube Cluster. Of these 95% are Romanian tourists, and statistics show a large increase in the number of tourists in recent years.

## **5. Conclusions**

The atmospheric risks existing at the level of the analyzed area and not only constitute a major problem on the natural environment with repercussions on the population and human activities. I have sought to highlight the problem of balance, both variable in space and time, between natural and social factors.

The natural environment offers conditions for the development of settlements, as well as tourism. The studied area has an extraordinary tourism potential, represented both by the numerous and valuable natural and anthropic objectives, all together making this part of Romania one of the regions with the highest tourism potential.

The climate is favorable due to the fact that the area is positioned in the South-West part of the country in the sub-Mediterranean air masses, which imprints a mild climate on the studied area, with shorter periods of manifestation of atmospheric risk phenomena.

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## THE IMPACT OF CULTURAL TOURISM IN ECONOMY

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**Abstract:** *Travel became nowadays a very important role in the life of people and now it represents the largest form of temporary migration in the world. Culture has been an official competence of the European Union since 1992. As such, it has a budget, a programme and specific actions. The European Union considered that the cultural aspects did not receive so much attention until then such as political or economic ones, for the they created The European Capital of Culture. The purpose of this research is to point out the importance of cultural tourism in the economy, the role the European Capital of Culture in the tourism market and how the European Union is managing it, and the interaction between locals and tourists. Cultural tourism is one of the main types of tourism in the modern recreation industry. It envisages the implementation of strategies for the socio-economic development of cities and urban plans.*

**Keywords:** tourism, cultural, heritage, urban, city, capital.

**JEL classification:** Z19, Z30, Z39.

### 1. Introduction

Culture has become a key element in the competition between cities to attract visitors, and museums have become catalysts for the development of cities and have encouraged the development of local economies. As a trend of cultural tourism, cultural capitals have emerged that have been created to bring change to the profit side of the city.

Cultural tourism is a concept that appeared more recently on the tourist market, with the changing preferences of tourists to travel. Due to the stress at work, the increasing number of days off, the possibility to work remotely, they prefer shorter and more frequent vacations, which simultaneously satisfy several needs. This type of tourism does not take into account the season and includes several needs: relaxation, knowledge and the need for cultural activity (visits to museums, theaters, concerts, festivals, cultural events, etc.).

According to Bogdan (2019) over the time this type of tourism suffered a double negligence: “those interested in the study of tourism have tended to neglect the urban context in which it took place mostly, while those interested in urban studies have neglected also the importance of the tourist function of the cities”.

### 2. Cultural tourism

Travel became nowadays a very important role in the life of people. Global travelers have grown exponentially after the Second World War, and now tourism represents the largest form of temporary migration in the world. The World Tourism Organization

has assumed the culture and heritage have become components in almost 40 percent of all international trips undertaken (De Dallen J. Timothy, Stephen W. Boyd, 2003). The literature emphasizes that cultural tourism has its origins in the urban environment. In this context, it can be considered that urban settlements represent the places where most forms of cultural tourism take place. Cultural tourism is one of the main types of tourism in the modern recreation industry. As a new phenomenon, cities have realized that they can be a source of income, so they developed city breaks which consist of about 1-3 nights.

The historical and modern constructions are the tourist objectives that ensure the identity of the cities in the cultural tourism market. The cultural heritage of a city is divided into the immovable cultural heritage and the mobile cultural heritage. The architecture reflects the economic condition, the environment, and living conditions of a settlement, framed in a cultural landscape. Heritage needs to be constantly repositioned and re-evaluated by desires, practices and social needs. It is also important to incorporate and recognize a wide-ranging, more-holistic and all-inclusive understanding of heritage in heritage management and conservation practices (Park, 2014).

### **3. The European Capital of Culture**

According to Herrero (2006) The European Capital of Culture is the new trend of cultural tourism being created to bring a change beside to bring a profit to the cities. The initial plan for the "European City of Culture" was launched at intergovernmental level in 1985 and later supplemented by the "European Cultural Month". On the basis of these activities, Decision 1419/1999 / EC established a Community action in favor of the "European Capital of Culture" event for the period 2005-2019, hereinafter referred to as "the action". It established a chronological order indicating for each year the Member State entitled to host the event. Third European countries could also apply without being subject to a predefined chronological order. The European Capital of Culture is formally designated four years before the actual title year. This long period of time is necessary for the planning and preparation of such a complex event. It is also the time needed to embed the event in a longer-term cultural strategy, to significantly engage with the citizens, to make the necessary European connections and to ensure the right infrastructure in the place.

The Capital of Culture Program served as a catalyst for the cultural development and the urban development. A Capital of Culture can be an opportunity for the city to generate considerable economic, social and cultural benefits and it can help foster urban regeneration, change the city's image and raise its visibility and profile on an international scale (Săgeată, 2017).

The Capital of Culture can bring enormous benefits to a city in the cultural, social and economic field, throughout the year and beyond. For some of the past European Capitals of Culture, whose cultural events have been a success, it has been estimated that for every one euro invested, an income of 8-10 euros has been achieved. In addition, the event can help increase the number of jobs.

### **4. The impact of cultural tourism**

Along with the development of tourism in certain urban areas, there have been challenges such as: increasing tourist flows - overcrowding of the city, parking lots, restaurants, adapting the menu to tourists' preferences - culinary challenges, rising the prices, concern or lack of concern for new investments.

Another challenge of tourism is the passive interaction between locals and tourists. The tourist activity is supported by the locals until the moment when it affects the daily activities. Cultural heritage in cities is generally not widespread enough to spread tourism across a large base of resources. On the other hand, it is not concentrated enough to constitute an autonomous and limited "museum-city" structure. Thus, growth constitutes a threat for other urban functions (Russo, 2002).

The profile of the cultural tourist has in view a high degree of education, with higher incomes than other categories of tourists, which leads to spending a much higher amount of money per visit and a longer stay (Bogdan, 2019). Tourists feel disappointed when their prior expectations exceed the perceived performances and they feel satisfied when the apparent exhibitions surpass earlier desires (Asmelash & Kumar, 2019).

Besides the extra demand generated from direct expenditure by tourists in a destination, further income and employment is generated in the economy from the cyclical flow of money, an effect known as the multiplier effect (Holden, 2016).

Cultural tourism envisages the implementation of strategies for the socio-economic development of cities and urban plans. It can bring great economic benefits to cities, but cities with a diverse social, economic and cultural base that benefit most from tourism are the least dependent on it.

## **5. Conclusion**

Cultural tourism has its origins in the urban environment. From the point of view of tourism planning, urban cultural tourism is a type of tourism that transforms the cultural assets of a city into tourist attractions. Tourist destinations around the world emphasize the positive emotional connections they seek to make between places and visitors. This type of tourism encompasses several needs: relaxation, knowledge and the need for cultural activities. This further emphasizes the importance attached to positive emotional responses associated with tourist experiences (Hosany, Hunter-Jones, McCabe, 2020).

The cultural heritage of a city is divided into the immovable cultural heritage and the mobile cultural heritage. The architecture reflects the economic condition, the environment, and living conditions of a settlement, framed in a cultural landscape. Museums have become catalysts for the development of cities and have encouraged the development of local economies. Cultural capitals have emerged as a trend of cultural tourism.

The relationship of museum activity to the economy of a region is a complex of measures, which can directly influence the number of visitors and the image that a museum has in the long run (Mitrache, 2012).

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## CONSTRAINTS IN SMES FINANCING – OVERVIEW

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**Abstract:** *The importance of the role played by SMEs in the global economy and their contribution to job creation, added value, innovation and growth is widely acknowledged, therefore it is extremely necessary to support their development. In order to be competitive, SMEs rely on external financing, but they are often limited in their development due to lack of financing caused by constraints such as: information asymmetry, lack of guarantees, high risk profile and unstable legislative and economic environment, but also the quality of the projects submitted for financing. Managers place great emphasis on financing their businesses, and most of the European companies relying primarily on bank loans as their most important source of funding. The present study aims to analyze the obstacles faced by SMEs in securing financial resources, the awareness of these difficulties being essential for decision makers to design and implement appropriate measures in order to facilitate access to financing.*

**Keywords:** SME, financing constraints, bank financing

**JEL classification:** G21, G32.

### 1. Introduction

The purpose of this paper is to present the determinants of financial constraints faced by SMEs in our contemporary economy, one best characterized by a continuous dynamic, mostly influenced by the current accelerated development of digitalization. According to the study conducted by the European Commission and the European Central Bank, in the European Union, SMEs are the main sources of economic development, generating 85% of the jobs and about three quarters of added value.

Personalized support is essential to help SMEs grow. At all stages of development, they struggle much more than large enterprises to obtain financing. In order to maintain their competitiveness, they depend on external finance.

Access to finance is one of the most important obstacles faced by SMEs in their development process. Most companies in Europe rely on bank loans for external financing.

EU Member States have implemented various policies and programs designed to remove the various obstacles faced by SMEs when trying to access different sources of funding. The European Investment Bank Group (EIB Group) - made up of the European Investment Bank (EIB) and the European Investment Fund (EIF) focused on SMEs - plays an important role in improving access to finance for SMEs.

This paper is structured as follows: the first part contains introductory remarks on the importance and relevance of the topic; the second part is dedicated to the review of the literature that summarizes the main research undertaken so far on this topic and highlights the major difficulties in financing SMEs; the third part of the paper mainly reflects the relationships of companies with banks depending on their type, market structure and measures to be taken to improve access to finance for these enterprises. The study concludes with conclusions.

## **2. Literature review regarding the access to financing; barriers in SMEs financing**

Numerous studies have shown that access to finance for businesses faces various obstacles, especially for SMEs.

In a study based on a survey that included 10,000 companies from 80 countries, Beck et al. (2004) pointed out the fundamental factors on which companies' access to finance depends, such as age, size and shareholder structure. Thus, young small companies as well as national ones, face greater obstacles when they try to obtain financial resources. The study also highlights the relationship between the degree of economic and financial development of the country and access to finance for enterprises. The authors point out that in developed countries it can be considered a decrease in the difficulties faced by companies when trying to obtain financing resources, which highlights the role of institutional development as the most important feature that can explain the differences between countries in terms of obstacles facing businesses.

Similarly, Beck et al. (2005), in a research based on a survey of firms in 54 countries where small and medium-sized enterprises face financial and legal constraints and corruption issues, show that the impact of these constraints on the growth of the company is inversely proportional to the size of the company. The authors noted that the development of the financial and legal system and the process of reducing corruption lead to relaxation of constraints faced by small and medium-sized enterprises.

Ardic et al. (2011) analyze the macroeconomic situation and the institutional factors that influence SME financing, both in developed and developing countries. Similar to other studies, the authors found a positive correlation between general economic development and financial development, on the one hand, and the level of financing of SMEs, on the other hand: the level of financing of SMEs depending on the legal framework and the general business environment.

Banks, like any company, want to maximize their profits while maintaining control over their loan portfolio. By analyzing credit applications, banks balance the risk involved and the methods of mitigating these risks. Financial institutions are reluctant to grant loans for a number of reasons:

- Information asymmetry, which arises from the lack of financial information and standardized financial statements of small enterprises, in addition to the limited knowledge of the bank about the borrowed company (Badulescu, Badulescu, 2010). This phenomenon results in an increase in the cost of capital borrowed by smaller companies compared to larger ones. Information asymmetry can lead to the exclusion of the financing of valuable projects. Often, the lender cannot distinguish between valuable and questionable projects (not even in terms of interest rates). As interest rates rise, companies with valuable projects are removed. Banks want to maintain the quality of their loan portfolio, refusing companies with a high degree of risk, even at higher interest rates. The pricing mechanism appropriate to the risk profile of the beneficiary of the loan, a riskier customer will receive a loan with a higher interest rate is called adverse selection (Miller, 2003).

Another problem arising from information asymmetry is the so-called moral hazard: once granted, loans are used for other purposes than those originally proposed (Berger and Udell, 2006). This aspect is solved in practice by the introduction in the financing contracts of some paragraphs with the clear specification of the way of using the credit.

The accuracy of financial documents, of reports generated by SMEs is often poor, and it is not possible to establish exactly the real profitability of the company, its ability to repay.

Information asymmetry creates much bigger problems for SMEs than large companies (OECD, 2000). The theory of human capital states that the education and experience of the owner-manager influences the access of enterprises to external financing. Therefore, the level of education of the manager influences and affects the decision to apply for external funding. However, many studies show that the level of education of managers is quite low in small firms compared to large firms (Nichter and Goldmark, 2009). Some SMEs are also characterized by inadequate technical equipment, by difficulties in providing qualified staff and experienced managers able to adapt to the continuous changes of the current period (Badulescu and Badulescu, 2010).

- When the information is incomplete, the banks focus on studying the collateral. Borrowing can often be difficult for small and medium-sized enterprises, especially if they have no collateral or a short credit history. Precisely because of this, various European financing programs support the development of SMEs: COSME, SMEI, INNOVFIN, EASI by providing collateral contributing to improving the success rate of lending offered by financial institutions.

- In the case of SMEs, the share of fixed assets in total assets is quite small, justifying the lower attractiveness for creditors. A significant part of short-term loans finance fixed assets, which leads to a financial imbalance. The equity ratio is quite low, and the failure rate is much higher than in the case of large companies. Financial institutions consider that the business environment in the case of SMEs is very competitive and uncertain. The vulnerability of SMEs to economic fluctuations leads to their inclusion in a high degree of risk (Beck et al, 2005). This is also the reason for the reluctance of commercial banks to grant loans. About 45% of large companies applied for a bank loan, have a much higher success rate (84%) and a much lower rejection rate (1%) than SMEs (OECD, 2019).

### **3. Market structure and financing constraints of SMEs**

The financing methods of the SMEs and the financing constraints that they perceive, differ depending on their type: micro-enterprises, on the one hand and small and medium enterprises, on the other hand. In addition to the size distinction, there are other characteristics, including seniority and the sector in which it operates, which require different approaches. So-called subsistence entrepreneurs have small businesses based on self-employment and are almost exclusively micro-entrepreneurs. Many of these businesses are set up for lack of alternative employment options for the owner. Studies show that these micro-enterprises are not job creators, hence the conclusion that micro-entrepreneurs are former employees (Beck, 2013).

Very different from these subsistence entrepreneurs are the transformational entrepreneurs, who often run larger companies that create jobs. For a long-term effect on aggregate growth and job creation, a stronger focus on processing enterprises is needed (Beck, 2013), (Aterido et al., 2009).

The availability of loans for SMEs depends largely on the infrastructure which supports financial transactions, including the legal system and the information environment. Commercial laws, regulations that are enforced and that effectively protect property rights are crucial to financial transactions.

Financial institutions have created specific lending techniques for small businesses, without adequate guarantees. For a long time, the relationship between the debtor and the creditor had a substantial impact on the decision to grant loans. Domestic banks were seen as the most important institutions in offering financing to small companies with opaque financial and commercial situations, based on long-term relationship between debtor and creditor. The penetration of foreign banks into the local market, on the other hand, is largely associated with the greater willingness to provide loans to SMEs (Clarke et al., 2006). For example, foreign banks may bring the necessary knowledge to introduce new lending techniques (Berger and Udell, 2006). In order to make their activities effective and reduce costs, financial institutions implement a standardized scoring for SMEs, which will reduce response time, will generate a higher volume of transactions and higher labor productivity.

#### **4. Conclusion**

This article summarizes the constraints that SMEs have on access to finance, which is an impediment to their growth and development. At the same time, financial institutions and the legal framework play an important role in relaxing these constraints, and innovative financial instruments facilitate SMEs' access to external financing. Studies show that inadequate financing of SMEs is a structural feature that should be mitigated through public interventions such as: non-reimbursable funds, grants to SMEs, guarantees, favorable tax measures.

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## CULTURAL TOURISM - CHALLENGES AND PERSPECTIVES

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**Abstract:** *The identity of each country is noted due to its cultural heritage. The fact that Romania preserves the cultural heritage, passed down from generation to generation, it also reflects the collective interest on its conservation and promotion, representing an economic source. Cultural tourism includes an extremely attractive area, we are talking about variety, both in cities and rural areas. This is reflected on traditions, habits, folk dances, folk art, fair, festivals, visiting heritage objectives, ecclesiastical tours, etc. Also, this kind of tourism has grown in the recent years, and it is on a field of competitiveness, because many years ago, the legislations in force, were not clearly defined or concretely implemented. This article aims to highlight the importance of cultural tourism in our society, the positive aspects and also the negative ones, taking into consideration that it is a field where tourists and culture meet.*

**Keywords:** cultural tourism; cultural heritage;

**JEL classification:** A13

### 1. Introduction

Romania has an inexhaustible tourist potential. Due to the beauty of the landscapes, combined with the Romanian customs, traditions and hospitality, Romania managed to be a worldwide attraction. Cultural tourism, also means a way of consolidation national identity. According to Minciu (2004), Romania has a rich and varied potential from the point of view of the typology of attractions of great value – with many original elements, some of them, even unique - and also competitive with the offer of other countries. There are many definitions in the literature, Băltărețu (2016, pp.75-88) stating that, the concept of cultural tourism is difficult to define, because it contains two different elements - culture and tourism.

In 2017, on the 22nd session, according to the United Nations World Tourism Organization (UNWTO) General Assembly, cultural tourism is a type of tourism activity in which the visitor's essential motivation is to learn, discover, experience and consume the tangible and intangible cultural attractions/ products in a tourism destination (UNWTO,2021). These attractions/ products relate to a set of distinctive material, intellectual, spiritual and emotional features of a society that encompasses arts and architecture, historical and cultural heritage, culinary heritage, literature, music, creative industries and the living cultures with their lifestyles, value systems, beliefs and traditions.

### 2. The role of cultural tourism in society

Society, to be included in the sphere of cultural tourism, it must fulfil three conditions:

To be determined by the interest for knowledge;

To take place the consumption of tourist product with cultural significance (monument, work of art, shows, exchange ideas);

To involve the intervention of a mediator –person, written document, audio-visual material - to highlight, to realize the cultural product (Commission Des Communautés Européennes,1993).

Tourism policies and activities should be conducted with respect for the artistic , archaeological and cultural heritage, which they should protect and pass on to future generations; particular care should be devoted to preserving monuments, worship sites, archaeological and historic sites as well as upgrading museums which must be widely open and accessible to tourism visits (UNWTO, 2020)

Taking into consideration that we are talking about heritage and traditions, the transmission of cultural identity should be cultivated from early ages, through appropriate cultural and educational programs. Considering that it is almost impossible for this to happen in every family, school can be a good generator, as early as primary school, students have exposure to various important tourist attractions, museums, participate at traditional festivals, organize church tours and many activities. Exposing students to the touristic subject will further enhance their personality and their role in our future society. Therefore, attracting the interest of students and young people in this matter, should not be neglected because it is about the development of students, who are our future.

Tourism itself cannot be seen as a good or bad action, positive or negative; however, its very diverse consequences, can be evaluated in this form. The effect of the tourist activity, both economically and socially, depend on the behaviour of all those involved, but also on the observance of some ethical norms (Țigu, 2008, p.31), and Bourdieu (1984), argued that scientific observations show that cultural needs are the product of learning and education.

### **3. The role of cultural tourism in the economic development**

For many countries, tourism is an important income activity, exclusively or complementary to other economic activities, below is a list of some of the benefits:

It offers both skilled and unskilled employment opportunities, as it is an intensive labor industry;

Develops infrastructures that can be handled by the local and large industries;

Generates a sufficient amount of money;

Increase incomes;

Increase the gross domestic product (GDP);

Helps the economic diversity;

It is going to be one of the most compatible economic development activities with other economic activities;

Increase the public's incomes;

Offers jobs for artists, such as actors and musicians, because the tourist is interested in the local culture, improving the culture heritage; Cultural tourists are an important source of spending money in the local or regional economy, helping to generate growth, investment and jobs. Cultural tourists have been identified as a market segment that can generate economic benefits (Băltărețu, 2016, pp.75-88). Also, cultural tourism is a stimulating factor in the Romanian's GDP, the percentage reported in 2018 was 2,909 %, but due to the pandemic, generated by Covid-19, this percentage is lower at this moment (Institutul National de Statistica, 2018). Moreover, tourism seems to be more effective than other industries in generating employment and income in the less developed, often peripheral, regions of a country where alternative opportunities for development are more limited. Indeed, it is in these areas that tourism can make its most significant impact. In such places many of the local



people are subsistence farmers or fishermen, and if they become involved in the tourism industry their household incomes increase by a very large amount. The growth of tourism in such areas may provide also a monetary incentive for the continuance of many local crafts, whereas the tourist hotels may create a market for local produce (Theobald, 2005, p.82)

On the other hand, any event or cultural action needs a marketing effort for its own promotion. Today, there is almost no sector where the internet is used, so cultural tourism enjoys a good promotion and exposure, both on the profile sites and also by tourists, who are involved to stimulate this sector. All these are organized to attract tourists of any age, both in the country and abroad.

The higher the flow of tourists or visitors, the more the economy is stimulated by consumption and is more profitable.

#### **4. Negative aspects of cultural tourism**

The extent and nature of the environmental and ecological damage done by tourists is related to the magnitude of the development and the volume of visitors, the concentration of usage both spatially and temporally the nature of the environmental in question and the nature of the planning and management practices adopted before and after development takes place. Excessive and badly planned tourism development affects the physical environment of destinations (Theobald, 2005, p.92). Tourism has the power to uplift communities from poverty, but at the same time, it can destroy and the following damages can occur:

Soil pollution

Water pollution

Noise pollution

Air pollution

Speculating the tourist potential, there is a tendency to increase prices for both land and real estate. Another negative aspect is the insufficient qualified candidates for employment, over the time resulting labor shortages. Also, due to the crowded places, especially in urban areas, it is possible to happens thefts, aggressions, robberies or conflicts between ethnic groups.

#### **5. Conclusion**

The promoting of cultural tourism responds to a real waiting horizon. Education and enlightenment through this kind of attractive form, lead to a complex personality by specific means to cultural tourism. The adaptation of cultural tourism to the exigencies of the 21<sup>st</sup> century, involves the modernization of communication through the virtual world, valuing the cultural history through modern ways, being able to attract the attention and the interest of visitors.

It is visible where there is a professional tourist market in other countries and Romanian touristic regions. These areas meet a wide range of requirement in the field, the good results are expected and the share of cultural tourism in the economy of those areas, are increasing significantly.

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## THE GLOBALIZATION OF THE AUTOMOTIVE INDUSTRY

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### **Abstract**

*Globalization brings many benefits and opportunities, but also many challenges. The EU wants to seize the opportunities of globalization and reduce its negative impact. Globalization is often understood as a dynamic process of increasing interdependencies between states, as a result of expanding and deepening transnational ties in increasingly diverse spheres of economic, political, social and cultural life, with the implication that problems become global rather than national, demanding, in turn, a global solution. An EU-wide trade policy, instead of national policies, places more weight on bilateral negotiations and in multinational bodies such as the World Trade Organization (WTO). The main goal of EU trade policy is to increase trade opportunities for European companies by removing barriers such as tariffs and quotas and by ensuring fair competition.*

**Keywords:** globalization; automotive industry; energy efficiency; pollution; renewable energy.

**JEL classification:** O14, Q56.

### **Introduction**

Every industry wants to be the one that has the greatest weight and importance for a region or a state. In addition to the positive image provided by the title of "strongest", having the largest number of employees in a country generates an increased interest in the media and, of course, a greater bargaining power with the state authorities.

More than any other industry, the automobile is the very example of a globalization which involves the need to speak the same language: that of technology of course, but also of patents, marketing, law or human resources.

What does automotive mean? The automotive industry comprises a wide range of companies that deal with the design, assembly and sale of cars. This is one of the most developed economic sectors because cars are constantly manufactured, as the demand-supply ratio is extremely high.

In the automotive industry reliability, easy operation, high levels of efficiency and low emissions are key aspects of energy conversion, not only for the end products that convert fuel into mobility, but also for the supply chain that manufactures such products. The automotive supply chain faces not only strict regulations related to health, safety and the environment, but also intense competition and synchronized logistics where interruptions in vehicle production can be very costly. Almost no other industry is facing such enormous transformations as the automotive industry. Energy transformation, new mobility concepts and technological requirements for the vehicles of the future it means that car manufacturing is facing new challenges. Each new technical development in the field of automation technology increases the manufacturing requirements. At the same time, cost pressures are rising across the entire value chain.

### **Short review about automotive industry**

The unprecedented development of the automotive industry at European level over the last 3 decades has been based on a constantly expanding domestic demand determined in turn by internal factors such as the increase in motorization in European countries and the faster expansion and rejuvenation of the car fleet, on the one hand, and the spectacular growth of emerging markets (Asian markets, especially the Chinese one), on the other.

The European car industry is paying close attention to compliance with national and European environmental policies. To this end, sustained efforts have been made to reduce the amount of greenhouse gas emissions by creating low-fuel engines, while increasing the technical performance of new vehicles and by development of electric vehicles. Remarkable progress has also been made towards increasing the safety of passengers and other road users and improving passenger comfort. These technological developments have been possible thanks to the considerable investments in research-development-innovation made by large European companies in the automotive sector.

Consumers in developed and developing countries have different mobility needs. Continuous urbanization is able to lead consumers in the developed world to look for alternatives to owning a car, while it will encourage those in developing countries to buy more cars.

Car-sharing companies and integrated mobility services will become more popular in developed economies. In emerging markets, more and more people will have to buy cars to be able to transport themselves, but infrastructure development will not keep up with demand. In response, OEMs will need to diversify their portfolios to provide more services (such as car-sharing schemes) and have a greater presence in all vehicle segments.

New players will enter the market as a result of technological advances and the emergence of new needs among consumers. Non-car companies provide services such as: car-sharing, integrated mobility, use based on "black-box" insurance that sets taxes based on real-time monitoring of traffic performance, integration of electric cars and car entertainment systems advanced. The evolution of these new business models brings new players to the traditional value chain of the automotive industry, adding additional areas of risk and opportunity for original automotive equipment manufacturers in redefining their business direction. From the gap between supply and demand and volatile prices for raw materials, to changes in regulatory policies and the lack of qualified personnel in developed countries, the globalization efforts of the automotive industry have a tough confrontation with the realities of the present. In the face of these risks, the industry is forced to implement response strategies to allow the value chain to be flexible enough in response.

In 1885, Karl Benz, a German engineer and inventor, built the first four-stroke internal combustion engine powered by petroleum gasoline. Although several German engineers worked on their own version at the time, Karl Benz is credited as the true inventor of the engine. He used his invention to equip the first car in the world that was actually nothing more than a three-wheeled motorized seat. Later, Benz created four-wheeled models with improved engines, and in 1888 began in Germany the first mass production of automobiles.

Romania was one of the first ten countries in the world to put the car into circulation, since the beginning of its construction. Since 1895, two steam cars have been circulating in Bucharest.

If at the beginning of the First World War the fleet of cars in Romania exceeded the number of 1,000 copies, during the war, more than two thirds of these vehicles had been destroyed. After the conclusion of the peace, the park grew mainly due to the activity of the representatives from our country of the foreign car factories: Ford, Chevrolet, Renault, Fiat, General Motors. Starting with 1922, for five consecutive years, the import of cars has experienced a strong growth, with an annual average of over 2,000 cars, so that in 1926 there were 11,300 cars in Romania.

Automotive industry today and the view of the the future

The globalization of the car industry reflects the need for a new stage in the development of international competition. The "competitive positions" in the largest regional markets in the world are now perceived as interdependent and mutually conditioned. (Porter, 1986). This new competitive context had an effect on the review of strategies, important in terms of organizational adoption during a period in which productive and exchange norms were also the subject of a large imbalance. Despite operating in the same environment, car companies have adopted identical organizational strategies.

Romania is doing very well in terms of cars. It ranks 10th in the European Union for the creation and sale of cars, with several brands propelling the country to this place in the EU rankings. In addition to the quality and performance of cars, Romania has over 80 years of experience in the automotive industry, which is why it is currently one of the most important centers in Europe. The automotive industry is the industry of the future. As natural as it is for us to drive, to drive, these vehicles represent more than mobility, they represent freedom. Technology has radically changed our lives. And the software development and IT outsourcing industry has accelerated the technologicalization of the world.

### **The Green Era of Transportation**

Global warming is one of the consequences of excessive resource consumption. In recent years, they have amplified the presence of this phenomenon due to human activities, especially into the industrialization era , where fossil fuels are the main source of energy production.

The activities that produce negative effects on the environment have brought with them major climate changes, and scientists, but also policy makers have not remained indifferent to this phenomenon. As a consequence of concerns about limiting climate change, alternatives have been devised to reduce or even eliminate fossil fuels and other materials used in various industries and replace them with other renewable resources.

It's well know that the increasingly number of automobile has resulted in ecological concerns. Concerns that are the main topic at the Climate Changes Committees. In result, all industries must adapt in order to thrive, and the automotive industry offers a promising portfolio in order to achieve low emissions, even eliminating them.

Cars are a major part of road transportation, especially in developed areas, where there's a strong correlation between the GDP per capita and the car ownership. Where the GDP per capita grows, also the number of car owners increases.

In the coming years, the development of the I / O (Electric / Electronic) area will be largely influenced by trends such as: connectivity, electrification and automatic driving. Use cases introduced by these trends will have benefits for both customers and OEM (Original Equipment Manufacturer).

The automotive industry is investing heavily in producing a full range of zero-emission and low-emission vehicles, as well as Euro 6d / Euro VI vehicles that meet the toughest pollutant emission standards in the world. And it is vital that they can be

brought to market. Stopping type-approval by industry, technical services and national authorities clearly disrupts the approval of these new vehicles, which means that they cannot be sold. Similarly, if the authorities designated for vehicle registration are closed, businesses and customers cannot use their new vehicles. Therefore, the authorities of the EU Member States need to speed up the vehicle type-approval and registration process as much as possible, given the current constraints. Global environmental priorities, connectivity and standalone technology as well digitization along the production chain seem to will lead to fundamental transformations of the way in which the entire automotive ecosystem operates.

The set of space, cost and constraints time generates changes in the system sales that are increasingly oriented towards forms of renting and sharing and fleet sales it becomes the engine of business. The car market in Europe enters In a new era, one in which technology will play a role defining and will generate a repositioning of prices and decrease in volumes focused on conventional propulsion. The new car models launched in the last 10 years are more ergonomic, more economical, more environmentally friendly.

The global automotive sector is gradually recovering from the health crisis of 2021, driven mainly by the Asian and North American economies and more cautiously in Europe. On the other hand, the upturn in supply has been hampered by a global shortage of semiconductors since the end of 2020, forcing car manufacturers to stop production lines from time to time.

The increase in global car sales is estimated at 9% at the end of 2021, although still below 2019 levels and partly due to sales of electric vehicles (EVs), which account for 37 , 5% of all vehicles sold in Europe in Q2 2021 However, if the sector's sales recover, the threat of a new wave, and therefore further restrictions, weighs on the global economy as well as on the automobile industry.

In addition, the sector is still undergoing major changes with the development of electric vehicles and increasingly restrictive regulations. The automotive industry continues to reconfigure itself with the rise of e-mobility and the emergence of new players in the electric vehicle and autonomous car segments. Traditional manufacturers and equipment suppliers are under pressure and are eager to forge new partnerships to face these new challenges.

### **Conclusions**

Of all the manufactured products designed in the last century, the automobile is among the most successful. It is perceived as a means of rapid transport, comfortable, flexible and inexpensive and it has become a marker of social status or a means of displaying one's identity. The automobile is and will remain essential to the functioning of various industries, sectors, companies and economies around the world.

In many countries, the automotive industry represents a considerable industrial and economic power. Born in Germany and France, it developed in North America in the era of mass production, then perfected in Japan and the Republic of Korea. More recently, China has become a major player in this sector, particularly with regard to the production of electric vehicles. Vehicle production, specifications, model range, sales and trade, as well as the automotive industry's contribution to GDP, have grown steadily throughout its history. The automotive industry is so closely associated with 20th century industrial development and mass production and consumption that it has been dubbed the "industry of industries".

On the other hand, motor vehicle traffic is a major cause of local air pollution, greenhouse gas emissions and traffic accidents. In addition, given its considerable environmental footprint and concerns about working conditions in its supply chains,

the auto industry is under increasing pressure to reduce its negative spillovers and promote decent and sustainable work.

Given the profound transformations that are underway in the sector, the automotive industry will have to redouble its efforts to attract, recruit and train women and men and enable them to retrain and improve their skills. It will need to invest in the capacity of a workforce capable of mastering new technologies and endowed with the appropriate skills to drive innovation, productivity and sustainability in the future. At the same time, the automotive industry will need to make progress in other areas of decent and sustainable work in order to promote a just transition to a future of work that contributes to sustainable development in its economic, social and environmental dimensions.

The pollutants that interest us are released into the environment by engines, exhaust pipes, air conditioning, vehicle operation, etc.

For practical reasons, they are often classified into two categories, the most important of which are those whose measurement is compulsory for the homologation of vehicles. They are called "regulated pollutants" (PPR). These are for example carbon oxides, nitrogen oxides, light hydrocarbons, particles (PM10 and PM2).

The extraction of these raw materials itself uses natural resources and generates pollution. We talk about gray energy: it is the energy consumed during the life cycle of the car. Embodied energy is the production, manufacture, transport or even recycling of your car, not even counting its use.

The embodied energy of a car depends of course on its model, but we can estimate that of a gasoline city car at around 20,000 kWh. And contrary to popular belief that the pollution of hybrid and electric cars is less, the embodied energy of an electric vehicle is estimated at nearly 35,000 kWh. Indeed, the embodied energy due to the electric battery of these cars is very high. Then, during its life, your car will be maintained and repaired, which again requires energy and generates pollution. The battery will be replaced, as will its tires, fluids, bulbs, etc. Then it will end its life, and it will have to be recycled. While some parts and elements can be reused - this is called the circular economy - your car is also made up of hazardous waste (brake fluid, battery, air conditioning refrigerant), etc. These must be the subject of special treatment. Finally, there is the issue of using your car. Throughout its life, it will consume fuel and emit polluting particles and gases. These include carbon dioxide (CO<sub>2</sub>), a greenhouse gas. It contributes to global warming.

When we talk about car pollution, we often think of CO<sub>2</sub>, even if it is far from being the only source of pollution for a particular vehicle. The amount of CO<sub>2</sub> produced by a car varies from one vehicle to another depending on many factors such as:

The type of fuel consumed;

The amount of fuel consumed;

Engine power;

The weight of the car.

Transport is responsible for around 30% of France's greenhouse gas emissions, and cars are responsible for more than half of this CO<sub>2</sub>. However, CO<sub>2</sub> is not at all the only pollutant emitted by your car. This also generates nitrogen oxides (NO<sub>x</sub>), which are dangerous for health and are responsible in particular for peaks in pollution. There are also fine particles, which are unburnt hydrocarbons. They cause cancer and respiratory disease.

In addition, the sector is undergoing a major transformation. Indeed, the institutional environment is pushing manufacturers and equipment suppliers to develop electric motors. The year 2021 marks a strengthening of the regulations on the CO<sub>2</sub> emissions of new passenger cars. Thus, the European Commission has proposed to ban the

sale of new petrol and diesel cars from 2035, with the aim of achieving fully carbon-free transport by 2050. Consequently, the hybrid and electric segments are the most likely to recover quickly, as they enjoy public support, especially in Europe, China and the United States.

The sector's recovery can be seen in all regions of the world, with an increase in sales of electric and used vehicles. The recovery was strong in China, where production in 2021 is estimated at 0.9% more than in 2019 and represents 30% of global volumes. The fear of taking public transport due to the pandemic may have had an impact on the willingness of households to buy a car. In order to revive the sector's activity, the public authorities have put in place incentives such as subsidies for the purchase of electric cars until 2022.

Europe is also experiencing a rebound in production in 2021 and an increase in sales of alternative motor vehicles thanks to public subsidies and the application of strict environmental regulations. The general recovery is also visible in the financial results of the players in the sector.

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## BRIEFING MILESTONES OF ENTREPRENEURSHIP THEORY

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**Abstract:** *From small business to international companies, entrepreneurship is key to balanced and strong economies. Interest on the subject has been rising on both academic and general public, including youth, along with technological boom, capital availability and public access to financial education. In order to start off on a good note a well rooted knowledge, the aim of the current paper is to identify and present the primary meaning of entrepreneurship, in the past and nowadays. In order to be grounded in the historical aspect, it briefly characterizes, chronologically, the milestones of entrepreneurship theory, to show the reality of human events.*

**Keywords:** entrepreneurship theory, entrepreneurship history, creative destruction.

**JEL classification:** L26

### 1. Meaning of Entrepreneurship between ethics and economic growth

Entrepreneurship was a subject to wide debate over times, in many cultures and civilisations, built up along with economic development. "Entrepreneurship means different things to different historians" (Casson and Godley, 2005, p. 25) as it implied simultaneous development to the various sides of one's innovative way to earn a living.

A consistent definition of the term "entrepreneurship" is therefore hard to agree on among specialists, rather, it is transformed into a collection of capabilities that an entrepreneur should identify with. There are 12 entrepreneur identities settled by Hébert and Link (2009), as follows: the entrepreneur assumes risks associated with uncertainty, the entrepreneur supplies financial capital, the entrepreneur is an innovator, a decision maker, an industrial leader, a manager, an organizer of economic resources, an owner, an employer, a contractor, an arbitrageur, an allocator of resources among alternative uses.

#### 1.1 Ethics – New Implications in Entrepreneurship

Nowadays, the interest on entrepreneurship knows a significant rise, especially among young people with access to superior education. Beside following entrepreneurship theory recommendations and being new opportunity chasers, entrepreneurs have to acknowledge moral and ethical values within their business, environmental protection and social care, seeking to achieve success not only according to business criteria, but also to ethical consequences. Entrepreneurial aspirations of the youth emerged to a new dimension and new fulfillments, as „entrepreneurship was found to have the allurements of independence, empowerment and power, social usefulness and employment and wealth creation for the self and the society" (Mehmood et al., 2019, p.1).

## **1.2. Entrepreneurship and Economic Growth**

It is generally accepted that entrepreneurship is related to economic growth, despite the fact that this interdependence didn't prove its causality. Therefore, studies have been conducted on the variables involved, considering the factors that go into these decisions and also macroeconomic theory. Regarding González' (2020) study, the linkage shows an important relevance of economic growth only when associated with entrepreneurial activities based on high opportunities of specific business initiatives, with solid arguments to justify it, and not when associated with generic entrepreneurship, based on necessity. In this sense, opportunity-based entrepreneurship is defined by those circumstances when "entrepreneurs create businesses when they see a business opportunity" and necessity-based entrepreneurship is distinguished by the situations when "entrepreneurs are forced into starting a business out of necessity because of the lack of other options in the labour market" (Fairlie and Fossen, 2018, p.1).

## **2. Entrepreneurship Theory**

### **2.1 Prior to 1755**

The functionality of an entrepreneur can be linked as far as human activity started the barter process. There always existed this unquestionable "entrepreneurial talent" which arose in some leaders, starting in military, as gaining a battle was most often about gaining economic benefits, by taking the risks. It was also about taking the risks on ancient merchants, to who the words "trader and adventurer" had the same meaning. Marco Polo set the way to new business, enriching the current offer of products at that time. Prior to 1755, economic theory was scarce and were primarily theologian writings and philosophers, especially of Spanish Scholastics (Hébert and Link, 2009).

Mercantilist writings during 16-18<sup>th</sup> century, were oriented toward self interest economic results and protecting their own wealth despite a methodical approach of commerce. As a response, anti-mercantilists wrote about their opposition to mercantilists policies of the ruling elite, motivated by "fairness of things", efficiency of tax systems and not oriented toward trade (Brown and Thornton, 2013).

### **2.2 Richard Cantillon – 1755**

In the entrepreneurship literature, "the original thinker on entrepreneurship" is considered to be Richard Cantillon in his work entitled "Essai sur la Nature du Commerce en Général", anonymously published in 1755. Cantillon's main contribution was to remove the political influence, and focus on "the economic features of human actions". When it was published in 1755, "economics took a giant step forward and became a more scientific, systematic discipline in its own right" (Brown and Thornton, 2013, p. 405). It also grounded the foundation of Physiocratic School of Economics.

Through his work, he rejected the prior mercantilist writings, and founded his vision on trade. After an analysis of labor and wage rates, he emphasizes a remarkable discovery, that the "intrinsic value" of a thing is its opportunity cost, that being the true cost of something. Also, relates the mutual interdependence between price signals and self regulating economy. He places the entrepreneur in the centre of all forms of human establishments – villages, market towns, cities, which are interrelated and depend on the decisions of entrepreneurs (Brown and Thornton, 2013). Richard Cantillon referred to an entrepreneur as a person willing to take risks and able to manage uncertainty.

### **2.3 Adam Smith - 1776**

Adam Smith' classic work „An Inquiry into the Nature and Causes of the Wealth of Nations”, written in 1776, concluded that both individuals and nations can obtain comparative advantage by specialization, if some can produce a specific good at a lower relative opportunity cost than others would, a fervent sustainer of capitalism. Markets can be considered the invisible hand to systematically designate resources between specialized parties (Lusch, Liu and Chen, 2010). According to Hébert and Link (2009), Adam Smith obscured the term of entrepreneurship “by confounding the roles of entrepreneur and capitalist”.

### **2.4 John Maynard Keynes - 1936**

Entitled „an economist of the real world” due to his wide experience in both academic and private fields, he was one of the most influential economist of his time. During the Great Depression of the 1930, he advocated fiscal and monetary policy to mitigate the negative effects of economic recession. His influence on entrepreneurship theory is regarding monetary policies, sustaining that only people's savings stimulate new investments efficiently. Investments based on expansion of affordable credits, would only lead to artificial production structures, ultimately getting to have more crisis and recessions (Davidson, 2007).

### **2.5 Joseph Schumpeter – 1942**

Capitalism sets the entrepreneur at the basis of the economy, with variable success on establishing the way of influence or importance. The primary focus is the customer, as they decide if the product is worthy to be bought or not, associated with the further existence of an entrepreneur on the market or not. Schumpeter emphasizes that capitalist production have the capacities for innovation and technical economic progress, which can create the desired products by customers. Joseph Schumpeter develops the concept of „creative destruction” in his work „Capitalism, Socialism and Democracy”, published in 1942. He refers that by an innovative combination and fundamental changes of production factors, old conformations are destroyed and replaced by new ones, creating new values and opportunities (Vaz-Curado and Mueller, 2019). By this process, “the entrepreneur is able to respond to a particular opportunity through innovation understood as a process of substitution of some products, processes or organizational forms for new ones, that is, through the creation of new combinations of resources” (López et al., 2016, p.162).

### **Conclusion**

Entrepreneurship was a largely discussed subject over time, along with economic development. Although scientists had numerous perspectives on defining it, identities of entrepreneurs were more easily agreed on, such as: taking risks with uncertainty, being innovator, a leader. In present days, entrepreneurship combines new implications, of ethical values.

The first important step in entrepreneurship theory belongs to Richard Cantillon, in 1755. He removes the political influence from the writings of the times and emphasizes on trade, on the intrinsic value of a product and the ability of the economy to self regulate by price signals. He places the entrepreneur in the centre of the economic existence. Followed by Adam Smith, he writes about the comparative advantage of a nation, placing the entrepreneur around this main idea. John Maynard Keynes reignates entrepreneurship theory, by monetary policies sustaining that entrepreneurship can only survive by savings, and not by easily affordable credits.

Joseph Schumpeter develops the „creative destruction” concept, which states that in a capitalist world, new production factors combined, destroy the old structure, creating a new, more valuable one, which the entrepreneur can take opportunity on.

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## THE ROLE OF COACHING IN INCREASING LABOR PRODUCTIVITY

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**Abstract:** *In organizations, coaching is like a constant training, an extensive process that has from the beginning every stage thought out, calculated. This process is a permanent one and takes place on a long-term basis. The only circumstance in which this crisis situation is not applicable. Therefore, because crises are not, it can be applied in an organization. Through this paper I want to highlight the importance of coaching in the organization and especially its beneficial effects in increasing the labor productivity of employees, I want to bring as close to the reader or overview of the whole process so beneficial in any team.*

**Keywords:** Labor productivity; Firm performance; Firm grow; Training; Human resources development.

**JEL classification:** J24; L20; L25; M 23.

### 1. Introduction

The principles of coaching spread quite quickly in American corporations, and reached Europe through Sir John Whitmore's book, "performance coaching" (1999). In 1992 Thomas Leonard founded Coach University which put coaching on the map. Obviously he was followed by many coach training schools.

A 2004 study by the Chartered Institute of Personnel and Development found that 79% of businesses use coaching.

We could say that we are dealing with a rediscovery of the value of clarifying questions. And this is because this action is also called the Socratic method. In this sense, Socrates is the leading representative. The character of Socrates often intervened in discussions to "disturb" by the fact that he did not understand some things and asked for further clarification.

A relatively new term and partially inaccessible to the uninitiated in the field, coaching is not an innovative notion. But none long used. Moreover, an incorporation of concepts and ideas from different fields, officially receives some definitions. Thus, the European Coaching Institute (ECI) defines it as a process that "helps the client to give up what he is now in order to become what he wants to become".

Coaching is "a partnership with clients in a process considered challenging and creative, which inspires them to maximize personal and professional potential" - International Coaching Federation.

With multiple applicability, respectively in various fields (starting from business, financial and ending even with the religious field), this discipline has its roots in sports. Thus, Tim Gallwey's book "The Inner Game of Tennis" published in the 1970s, is considered by some to be the "birth certificate" of coaching, although this term often causes confusion in the field (coach-coach).

Historically, it has been influenced by many areas of activity, including personal development, adult education, psychology, and other organizational or leadership theories and practices. Since the 1990s, however, it has become an independent

discipline and has led to the creation of professional organizations, such as those mentioned above.

## **2. The role of coaching in increasing labor productivity**

Every day, employees are asked for and set new goals, they are asked for immediate results and they are under constant pressure. From this perspective, the implementation of training is perceived as an additional risk that it assumes. Therefore, many prefer to threaten, claim or do what they are asked to do. This approach, on the other hand, is not valid in organizations dedicated to competition and those that are successful. You have to trust the employees, the people, if you want to get the best performance.

The main reason that many managers invoke when they abandon the idea of "coaching" in managerial activity, is the lack of time, but in reality it is due to the lack of a philosophy of training in management. Improving performance in the opinion of a large number of managers can be achieved simply through training but in a more detailed picture we realize that the barriers of employees are deeper.

Coaching also involves a change of attitude which is, in the end, the most difficult task and cannot be achieved in a short training process. Speaking of attitude, this is often confused with, behavior, for a better understanding of what attitude versus behavior means. Here are the definitions of the two words according to DEX:

Behavior - way of behaving, conduct, the totality of an organism's reactions to internal and external triggers.

Attitude - body posture, way of holding the head: distinguished, elegant attitude; mood, way of being or behaving.

## **3. Program to increase the productivity of employees at work through coaching**

The concept of on-the-job training tries to sensitize employees and familiarize them with the idea of self-improvement and when they have the appropriate support from managers, the company, their performance can reach high levels. In the diagram below we can see the stages and especially how we establish the relationship of trust in an organizational coaching process meant to increase employee performance.



Figure 1: The steps of the executive coaching process

Source: Coaching Partners (2017) Coach for champions - Specialization program for the occupation "Specialist in coaching activity".

## 5. Conclusion

Studies have shown that in organizations where employees benefit from coaching, they feel appreciated, supported and more involved and stay within the organization for a longer period of time. In other words, there were significant increases in staff motivation and retention.

In conclusion, I consider coaching, a way of professional or personal development, an extremely valuable tool that can bring exceptional results, both for a person and for the organization of which he is part. Here are just some of the benefits to organizations:

Better use of resources by increasing the focus on solutions, efficiency and productivity;

Combines and uses in a much more efficient and creative way the resources available to each member of the team;

Decreasing resistance to change and the use of potential energies in order to achieve the business objective;

Strengthening teams and ensuring optimal dynamics for performance;

Changing culture in the direction of innovation;

Accelerating the adaptation to new roles and responsibilities of employees;

Assuming executive and strategic roles for top management teams;

Clarifying the career path and aligning the individual career aspirations with the strategic objectives of the company;

Preparing successors for key positions.

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# THE STATUS OF IMPACT OF THE NATIONAL EDUCATION SYSTEM ON STARTING A BUSINESS: AN ANALYSIS IN VIETNAM

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**Abstract:** *The education system plays an important role in human development. It is not only in terms of improving knowledge, solving social problems on many levels but also contributing to the development of the economic activities of a country. In addition, entrepreneurship and entrepreneurial activities are also strongly influenced by the education system of the nation. Today, entrepreneurial activities play an increasingly significant role in the development of the country. Therefore, it needs to be paid attention to and focused on the building of an educational environment suitable to the characteristics of entrepreneurship. From there, it is possible to create a dynamic environment, promote business development and start business activities of the country. This paper first provides a brief overview of the role of education in entrepreneurship. Next, the research method and research results are presented on assessing the current status of the role of the national education system in starting a business in Vietnam. Finally, the paper ends with some suggestions and conclusions of the study.*

**Keywords:** education system, entrepreneurship, starting business, Vietnam

**JEL classification:** I25, M13, M21

## 1. Literature review

### The relationship between education and entrepreneurship

Entrepreneurship is considered as one of the main drivers for economic and social development, generating many benefits both financially and socially around the world (Păunescu and Molnar, 2020). Therefore, promoting and enhancing entrepreneurship is an important task of each country. Uzunidis et al. (2014) stated that the resources that entrepreneurs need to excel can be grouped into three main categories: (1) knowledge through education and professional experience; (2) finance through savings, loans, or grants; and (3) relationships through networks, family relationships, and personal relationships. Among the factors affecting entrepreneurship, education is considered one of the important factors affecting entrepreneurial intention (Zhang et al., 2013). Policymakers also believe that increasing the level of entrepreneurship can be achieved through education (European Commission, 2003) and primary education in entrepreneurship (Varadarajan Sowmya et al., 2010). Păunescu et al. (2018) also emphasized that education level is considered to be a strong determinant of entrepreneurial readiness and decision of entrepreneurs.

Do Paco et al. (2015) assessed that entrepreneurship education has a role to play in promoting entrepreneurial intentions and furthering enterprising citizens by improving management knowledge and developing psychological attributes and behaviors associated with entrepreneurship. Păunescu and Vidovic (2020) also argued that entrepreneurship courses contribute to awakening academic curiosity about the

necessary topics and contents of social enterprises. Evaluating specifically, Piperopoulos and Dimov (2015) also observed that the nature of the entrepreneurship course - whether theoretically or practically oriented - creates a distinct framework for entrepreneurship, especially creating high efficiency for practical orientation courses of entrepreneurship courses for entrepreneurship. In addition, some studies suggest that higher education is an important factor in entrepreneurial decisions (Kerrin et al., 2017).

Research by Kerrin et al. (2017) confirmed that, even in emerging economies with poor education systems, courses in entrepreneurship increase the desire for entrepreneurship and entrepreneurship. Following the same idea, research conducted by Diaz-Garcia (2015) in the academic field demonstrates a higher interest in the desire to start a business in students after completing a course in entrepreneurship. Furthermore, Pajarinen et al. (2006) argued that the evidence suggests that educated entrepreneurs are more important in developing regional economies than less educated entrepreneurs. Accordingly, more educated entrepreneurs are more likely to innovate, use modern business models, and base their businesses on new technologies (Pajarinen et al., 2006).

However, some studies suggest that the influence of education on entrepreneurial intention is limited (Byabashaija and Katono, 2011) or has no effect on entrepreneurship (Praaf and Ophem, 1995). Specifically, a study in Serbia on the educational level of entrepreneurs showed that only 10.8% of the total number of entrepreneurs surveyed had a college or university degree, and the rest have less than a university degree or have not completed primary school (Stefanović and Stošić, 2012). This result is explained by unsatisfactory work conditions, so people choose to start a business or because of unemployment (Stefanović and Stošić, 2012). Deli (2011) argued that people with less ability to become entrepreneurs are not necessary, while those with higher skills choose to start a business because of opportunity. Research by Păunescu et al. (2018) pointed out that in Romania, it is not that the higher the educational attainment, the stronger the desire to start a business. Therefore, we need an overview of the role of education in entrepreneurship.

## **2. Research Methodology**

The purpose of this paper is to assess the actual impact of the education system on starting a business in Vietnam. From there, there is an overview of the role of education in entrepreneurship activities in Vietnam currently. To achieve the above purpose, the paper has analyzed through statistic data collected from the survey of The Amway Global Entrepreneurship Report (AGER) in 2018. The question in the AGER Report relevant to the education system used to analysis is:

- With which of the following statements about your country do you agree?
- For starting and running a business, the education system in my country teaches people the skills they need.

To conduct an assessment of the influence of national policies on entrepreneurship, the analytical method used in this paper is the statistical analysis method. The results are presented related to the data statistically.

## **3. Results**

The total number of observed samples in the AGER research data for the year for Vietnam includes 1040 observed samples. This paper will use all of these 1040 observed samples to conduct analysis in our research. Statistical analysis results

show that there is a high rate of agreement (more than 50% of individuals choose the given factors), and there is a significant difference in those ratings among the national factors affecting and running a business. However, the agreement rate on The influence of the education system on starting a business and running a business is the lowest (61.9%) compared to other criteria such as The national tax policies which have the highest approval rate with 77.5% of respondents, followed by Beneficial economic situation (70.5%), Technology availability (66.5%), The national rules and regulations (63.8%), and finally The national education system (61.9%). This result proves that, although the influence of the education system is highly appreciated, it is still not considered in the factors affecting the operation and management of enterprises.

In addition, comparing the difference between the assessment level in Vietnam compared with the average level in Asia and the average level in the world, the Vietnamese education system is rated higher than the average level in the world. with Asia (53%) and the whole world (40%). This result shows that the role of the education system still has a strong influence on entrepreneurship and starting a business in Vietnam.

To further clarify the difference in assessment for the education system in Vietnam, the article continues to go into a detailed assessment of the assessment of different target groups, characteristics, and criteria. Statistical analysis shows a difference in the degree of agreement about the influence of the national education system in Vietnam on entrepreneurship. In detail, the consent rate of females (67.3%) is higher than that of males (55.9%). Regarding age, individuals with older age rated higher than individuals with younger. The consent rate of individuals aged from 36 to 69 was 67.7%, and the individuals aged from 15 to 35 years old was 57.2%. This result shows that there is a big difference in the assessment of age as well as gender.

Regarding the structure of respondents by Net-income, there is a tendency to gradually decrease the rate of agreement when the income of individuals increases. The highest rating rate was 72.1% for the lowest income group (\$280/month) and fell to 43.9% for the highest income group (more than \$1300/month).

Regarding university degrees, among the agreement respondents, 45.9% have a university degree, and 72.3% do not have a university degree. This is quite true with the proportion of people with university degrees in Vietnam today when the proportion of people with university degrees tends to increase over the years but still does not account for a high percentage of the population.

In addition, the agreement rate of individuals living in the South (66.7%) is higher than that of respondents living in the North in Vietnam (51.9%). This result is understandable because the economy in Vietnam is more developed and has a much more dynamic business environment than in the North.

Regarding the characteristics of employment status, the group of Not working individuals had the highest rating (65.6%) compared to the rest of the groups with a fairly balanced assessment (about 61%).

Through the analysis of the results, it is shown that the influence of the national education system on entrepreneurship in Vietnam is uneven. In this respect, the majority of surveyed individuals agree that the national education system has an influence on entrepreneurship and starting a business in Vietnam. However, the education factor is not the most important factor when starting a business. It is also influenced by internal factors of individuals as well as external social and environmental factors more than educational factors. In addition, characteristics such as age, monthly income, university degree, employment status, and place of

residence are useful in determining differences in the influence of national education on entrepreneurship and starting a business.

#### **4. Discussion and Conclusion**

Entrepreneurs are always expected to improve their qualifications, knowledge, and skills to meet their learning needs, improve their professional skills and adapt to the changing business and social environment. From there, entrepreneurs can ensure the development and enhancement of enterprises' operations. Therefore, countries and governments need to have solutions and policies for the education and training system in a reasonable way to contribute to ensuring the development of entrepreneurship of individuals in the best way.

However, the results in this paper in Vietnam show that although the education system has an impact on entrepreneurship, it is the most underrated criterion compared to others when starting a business. Another aspect that needs to be mentioned is that education needs to focus on differences in individual characteristics because there are differences in assessment between different groups. From there, the government can come up with appropriate solutions to improve the effectiveness of the education system in promoting and supporting entrepreneurial activities and starting businesses. In general, the national education system has many benefits, meanings. It contributes different significant roles in the development of the country and each individual. So, it can be seen and understood as an indispensable role to help individuals have the foundation and initial knowledge, but also to foster and improve each person's capacity. From there, its contribution is to help entrepreneurs start their business smoothly, limiting certain mistakes in their business process. Therefore, identifying and analyzing the influence, role, and relationship of education on entrepreneurship is an interesting issue. This issue needs to be studied the next time.

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# ENTREPRENEURSHIP AND ITS IMPACT ON NATIONAL COMPETITIVENESS

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**Abstract:** *Currently, entrepreneurship is identified as an important factor for contributing to the economic development of the nation as well as the change of society. A prominent feature of entrepreneurship is the enhancement of the country's competitiveness. Therefore, building and improving the nation's entrepreneurship is an urgent requirement to promote the country's competitiveness in the best way. In this paper, the relationship between national competitiveness and entrepreneurship is confirmed through quantitative analysis methods. In addition, the influence of entrepreneurship on the national competitiveness of countries in the world is also introduced. Finally, the presented results contribute to the promotion of studies assessing the influence of entrepreneurship and startups on national competitiveness. The paper ends with some discussion of the results and implications of the study.*

**Keywords:** Global Entrepreneurship Index, Global Competitiveness Index, entrepreneurship

**JEL Classification:** O10, M10, M21

## 1. Literature Review

### 1.1. The relationship between entrepreneurship and national competition

Currently, there is quite a lot of research on entrepreneurship as well as the characteristics and roles of entrepreneurship. However, few quantitative studies analyze the interrelationship between competitiveness and its role in increasing entrepreneurial activities at different stages of development (Rostami et al., 2019) as well as the purpose of improving the competitiveness of the country. Douhan and Henrekson (2008) have shown a strong positive relationship between effectiveness entrepreneurship and the innovation of the economy and its adaptability, thereby increasing the competitiveness of the economy. Practice proves that innovation and entrepreneurship are considered essential elements of national competitiveness (WEF, 2017).

In particular, understanding entrepreneurship is rooted in space making it a factor of national and regional competition (Nicolae et al., 2016). By research done in Romania, Nicolae et al. (2016) concluded that regional differences should be calculated when formulating national competition policy. Huggins and Williams (2011) also identified that less competitive regions are using to account issues related to entrepreneurship and business development as a tool to enhance regional competitiveness. However, research by Huggins and Williams (2011) also shows that there is a tension between using business policy as a tool to improve competitiveness in the region or to address economic and social disadvantages. Therefore, there is a need for more specific assessments of the role of entrepreneurship in regional competitiveness to limit possible drawbacks.

At the national level, Aisyah and Saputra (2021) argued that in the current era of globalization, essential parts of entrepreneurship are the development of economic competitiveness to increase the welfare of the community, especially nations. Countries need to improve entrepreneurship and innovation, thereby contributing to the country's competitiveness (Aisyah and Saputra, 2021). Besides, the study of Korez-Vide and Tominc (2016) also stated that the developed business sector has a significant influence on economic growth and the success of national economies. It ultimately determines the competitiveness of that country (Korez-Vide and Tominc, 2016).

At the international level, Zahra and Dianne Hansen (200) also identify entrepreneurship as playing a role in promoting global competitiveness. In reality, it can be seen that entrepreneurship is increasingly attracting attention about its role in decision-making policies that can promote economic and social development. There has also been increased attentiveness on how entrepreneurs innovate and, therefore, contribute to a higher level of international competition (Ferreira et al., 2017).

Herman (2018) explored the relationship between innovation, entrepreneurship, and national competitiveness at the EU level. Thus, it aims to highlight how innovation and entrepreneurship can influence the level of competition and inclusive development in these countries. The results show that there is a significant difference between the group of countries with medium and low innovation performance and the group of countries with high and very high innovation performance in terms of competitiveness, innovation, entrepreneurship (Herman, 2018). Reinforcing the above point, Fernandes et al. (2020) determined that innovation impacts competitiveness, and entrepreneurship shape the competitiveness of EU countries.

### **1.2. Global Entrepreneurship Index**

The Global Entrepreneurship Index (GEI) is a composite index that measures elements of a country's startup ecosystem. This index showcases the quality of entrepreneurship and support for the startup ecosystem. According to Acs et al. (2019), The Global entrepreneurship index identifies three levels for a country's score, including overall GEI score, scores for Individuals and Organizations, and pillar level. The main aim of the GEM project is to measure and define entrepreneurship in each country. The entrepreneurship research results of the Global Entrepreneurship Report have helped leaders and researchers have an overview and detailed view of entrepreneurship not only of each country studied but also of the whole world. From there, they can propose solutions and policies that contribute to promoting entrepreneurship in their country.

### **1.3. Global Competitiveness Index**

The Global Competitiveness Report is an annual bulletin published by the World Economic Forum (WEF), first released in 1979. The 2019-2020 report covers 141 economies, that major and prominent economy (Schwab, K., 2019). This report aims to assess the ability to provide a high or low level of prosperity for the population in each country. In particular, this report publishes the "Global Competitiveness Index" (GCI) to measure the trends of institutions, policies, factors that make up the current state, and the limits of economic prosperity.

In addition, this report has been built on more than 110 variables, of which two-thirds come from the Executive Opinion Survey, and one-third come from publicly available sources such as the United Nations. Based on this, the variables are organized into 12 pillars (each pillar representing an area considered to be an important determinant of competitiveness). All 12 pillars interact and influence each other. Weaknesses in

one subject often harm others. In general, the pillars are essential to a certain extent for the economy. However, because of the different stages of development of countries, they affect them in different ways.

## **2. Methodologies**

### **2.1. Research purposes**

The main aim of the study is to test the hypothesis that national entrepreneurship has a positive influence on national competitiveness. In addition, through the evaluation and comparison of two important criteria that is the Global Entrepreneurship Index and the Global Competitiveness Index by statistical analysis methods, the article also shows the relationship of the two indexes above.

### **2.2. Data collection**

The Global Entrepreneurship Index data of this study were collected based on GEM (2019) data. National competitiveness data is also collected based on the data of the World Economic Forum (WEF) 2019, Global Competitiveness Report. Due to the difference in the number of observed samples between different countries in the above reports, we have analyzed and used the observed samples countries and territories that share the data of both reports. The total number of observations collected for that study was 124 observations.

### **2.3. Data analysis**

The analytical method used in that paper is the regression analysis method used to conduct an analysis of the influence of entrepreneurship on the country's competitiveness. Regression is an analytical method to see how the independent variable affects the dependent variable when the independent variable changes. Here, the aim of the study is to examine how entrepreneurship affects national competitiveness.

## **3. Results**

### **Influence of entrepreneurship on national competitiveness**

To conduct regression analysis to determine the relationship between entrepreneurship and national competitiveness, the Pearson correlation coefficient was studied and used to analyze the statistical relationship between two variables, GCI and GEI. The analysis results show that the two indexes GCI and GEI have a close and direct correlation with each other (Pearson = 0.911). Besides, this Pearson correlation coefficient is also statistically significant with a significance level of 0.05 (Sig. value < 0.05).

To analyze the influence of the GEI on the GCI, the study conducted a regression analysis based on the OLS econometric regression model. The regression model has the following formula:

$$GCI = \beta_0 + \beta_1 \cdot GEI + \varepsilon \quad (1)$$

The results of the analysis of the conditions of the carried out econometric model show that the model (1) built above has a significance level of 0.05 because the Sig value. of the F-test is statistically significant (Sig. value < 0.05). Besides, the analysis results also show that the value of R<sup>2</sup> = 0.830, that is, the change of GEI variable explains 83.0% of the change of GCI. The results of the Durbin-Watson test (value is 1.908) show that the model does not have autocorrelation.



From that, the regression analysis based on the OLS model is estimated as shown in Table 1. In which, the regression results for the values of the independent variable (entrepreneurship) and the dependent variable (competitiveness) (see table 1):

$$GCI = 42.155 + 0.558xGEI \quad (2)$$

The results show that the coefficient of the GEI variable is statistically significant with a significance level at 0.05 (Sig. value < 0.05). In addition, the analysis results also show that when the dependent variable is the GEI changes by 0.1 units, GCI will change by 0.558 units.

**Table 1: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	42.155	0.915		46.059	0.000	40.343	43.967
	GEI	0.558	0.023	0.911	24.446	0.000	0.513	0.603

a. Dependent Variable: GCI

Source: Author's own research results.

#### 4. Discussion and Conclusion

The study confirmed the hypothesis of a positive relationship between entrepreneurship and competitiveness. The results have shown that through statistical analysis methods, mathematical analysis has determined that there is existence a close relationship between the two indexes, namely the national competitiveness index and the global entrepreneurship index. Besides, entrepreneurship has a positive impact on the competitiveness of the country. This influence is quite good. When entrepreneurship increases by one unit, it will increase national competitiveness by 0.558 units. This result has implications for policymakers of countries to develop policies on entrepreneurship with the goal of developing national competitiveness in accordance with the realities of their country.

In addition, this study has certain limitations related to the nature and characteristics of the data used for analysis in this paper. The samples of the study are based on a global structured survey conducted by GEM and WEF. However, the number of observed samples used in the study is still modest, not covering all countries in the world. Besides, the study can not go into the deep analysis of the effects of entrepreneurship on national competitiveness because it was based on available data. Future studies can go deeper into the measure of factors in the country's competitiveness. Furthermore, it may be possible to use a combination of many different criteria to assess the impact on the country's competitiveness in a more comprehensive way.

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## WAYS OF TOURISM RECOVERY DURING COVID-19: THE CASE OF SUSTAINABLE ROMANIAN TOURISM

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**Abstract:** *The waves of the COVID-19 Pandemic upset Romanian society, and among the most hard-hit sectors is the tourism sector. In the current paper, in order to understand the changes in the tourism sector, and thus bring a tourism recovery plan, 11 specialized papers were analyzed, from the platform "mdpi.com", introducing the keywords "tourist behavior COVID-19". Thus, internal issues were analyzed such as: lack of reliable information - the response of the media and the political environment; changes in tourist behavior; safety of tourist destinations during the pandemic - implications on the physical and mental condition of tourists. Our research exposes on the basis of observations from the literature, and by reporting to the national context, the issues where we should intervene promptly for the tourism sector to overcome the barriers generated by the pandemic.*

**Keywords:** Sustainable tourism, COVID-19, tourism recovery, tourism strategy, Romanian tourism

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

### 1. Introduction

Tourism, hard tried in 2019 following the outbreak of the COVID-19 Pandemic, has known during the almost two years, until the time of writing (October 2021), situations in which the business owners of the sector were at lower limit of survival. The aftermath of the 2020 pandemic can be translated by a simple comparison with the situation in 2019. Therefore, worldwide, there were 1.5 billion international arrivals, so an increase of 4% compared to 2018 (UNWTO, 2020). Although the forecasts of the World Tourism Organization (UNWTO) for 2020 supported an increase from 3% to 4%, so the eleventh year with continuous growth of the sector (UNWTO, 2020), the appearance of the first cases of SARS-CoV-2 infection at the end of the year In 2019, the world society would shake up, the economic sectors being no exception (World Health Organization, 2020). The pandemic declared on March 11, 2020 (World Health Organization, 2020) led to a bleak balance for the world tourism sector, with only the 381 million international arrivals registered, so a loss of -74% (UNWTO, 2020).

The entire year 2020 was dominated by travel restrictions in all travel destinations around the world, and 27% of international destinations kept their borders completely closed to international tourism (UNWTO, 2020). UNWTO even generated at the including the current pandemic, and the results showed that, in the case of the impact on international tourism, the crisis generated by SARS respiratory disease in 2003, brought disturbances of only -0.5%; in the case of the Global Economic Crisis of 2009, the change, also of a negative order, was -4%, while COVID-19 produced changes of -73.9% (UNWTO, 2020). Therefore, through only 381 million international tourist

arrivals in 2020, the Pandemic led to the situation of the tourism sector at net values lower than in 1990 (438 million international arrivals). Of course, revenues were also undermined, with losses of \$ 1.3 trillion, losses to global GDP were estimated at over \$ 2 trillion, while 100 to 120 million jobs from tourism have been under pressure (UNWTO, 2020). UNWTO also presents in the report for 2020, and 3 scenarios on how long the number of international arrivals will return to values considered normal in the pre-pandemic period. The first scenario is an optimistic one, with a return to the values of 2019, throughout 2022, while scenario 2 targets the year 2023, and scenario 3 is the most pessimistic, or, why not, realistic, approximating the return to normal not earlier than 2024 (UNWTO, 2020).

The return to normality must be perceived as reliable, only by the implementation by each of us, from the position of tourists, of new travel habits. A set of rules, a small glossary of the tourist in pandemic times becomes indispensable, helping us not only to meet the expectations in terms of tourism activity and the recovery of the entire sector, but must be seen as an aid to society. The pandemic gave us the opportunity to have more time with ourselves, to rediscover ourselves, to put more emphasis on interpersonal relationships, to find the beauty of simple, small things, things and even places that, so far we consider them unimportant. UNWTO has managed to create a profile of tourism in the times dominated by COVID-19, and the concerns are primarily focused on health and safety measures, so the adoption of preventive and responsible behavior, through diminished contact with large groups of people. Secondly, it seems that tourists have had the necessary time in the context of the pandemic to reflect on the principles of sustainability, because the authenticity of local communities, for example, has become a trend of 2020, according to UNWTO (UNWTO, 2020). It is also interesting that the segment of young tourists is prone and adaptable to these new changes. One of the many lessons COVID-19 has taught us, according to the WTTC, is that "sustainability is our collective responsibility." (WTTC, 2020).

However, is it possible that plans initiated at international level may not be applicable, for various reasons, to certain nationalities? The current paper aims to bring a qualitative contribution to the literature, by obtaining a general picture of Romanian tourism in 2021, related to the situation found in other papers on tourism behavior during the pandemic.

## **2. Methodology**

The methodology underlying the research was the integrative analysis of information from sites hosting international databases, using the keywords "tourist behavior COVID-19", following as based on the synthesized results, and related to the epidemiological context, political and tourism in Romania, to develop its own findings to support the management of the crisis generated by the pandemic at national level.

## **3. Literature Review**

By accessing the "mdpi.com" platform, and following the insertion of the keywords "tourist behavior COVID-19", we were suggested eleven papers, of which eight were chosen as the most relevant to the topic we addressed. Overall, the works highlighted the same general-valid idea, of the travel fears generated against the background of the pandemic, but also of the measures occurred in the tourist behavior or those tolerated by each government.

On October 6, 2020, the paper "Beach Tourism in Times of COVID-19 Pandemic: Critical Issues, Knowledge Gaps and Research Opportunities" is published in the

International Journal of Environmental Research and Public Health, through which the authors expose the problems generated by the current pandemic, studying the management of beach tourism in these circumstances (Zielinski & Botero, 2020). It was highlighted that tourists are prone to contact the virus much more easily, and this is due to the lack of reliable information and the lack of direct experience with the virus (Zielinski & Botero, 2020). The same study highlights the emergence of environmental problems, caused by indolence, namely the impact generated by the large number of tourists on natural and rural beaches, contamination of bathing water with virus, the lifespan of the virus on the sand, the impact of substances chemicals used for disinfection and pollution caused by discarded protective equipment (Zielinski & Botero, 2020).

Published on October 22, 2020, "The Impact of Covid-19 Outbreak on the Tourism Needs of the Algerian Population", this study refers to the perception of Algerian tourists about travel during the pandemic, the conclusions being that psychological stress occurred against the background the idea of illness, is a major concern of the 203 people who took the questionnaire, and which can be reduced or removed by the need for recreation and relaxation (Madani et. al., 2020). In fact, the study highlights how Algerian tourism can attract tourists, by reducing the cost of hotels and services in tourist areas, the cleanliness and disinfection of these sites, as well as the distance between tourism employees (Madani et al., 2020).

Another issue was raised by Marija Bratić et al., Namely the increase in anxiety due to the risks involved in COVID-19, resulting in changes in travel behavior, which should be addressed by tourism officials. attention to the provision of safe experiences, data of more isolated accommodation units and the possibility of undertaking more outdoor activities by tourists (Bratić et al., 2021).

On the other hand, Myung Ja Kim et al. It suggests that the frequency of international travel affects biosecurity behavior. Thus, the five-year period was analyzed and, in principle, people with a low frequency of travel (1-3 trips) are more likely to adopt a responsible behavior for COVID-19 disease than those who undertake 4- 7 trips or more than 8 (Kim et al., 2021).

In Spain, a study nuanced the effects of the pandemic on the way in which, through card transactions, tourists experienced major changes in tourist behavior, in the sense that natural environments, or less visited coastal cities in the past, were "destinations winners ", so the favorites of tourists (Donaire et al., 2021).

The study targeted 33 destinations where various forms of tourism were started by international tourists, concluding that the perception of risk was the main factor in making travel decisions, to the detriment of all marketing and management policies (Donaire et al., 2021).

Another study highlighted the fact that national parks are becoming real "shelters" for tourists, as they manage to raise awareness of COVID-19 as a health risk (Seong & Hong, 2021). The survey applied in the research targeted 555 respondents, and among the results it was found that decision-making for tourism purposes is based on the theory of planned behavior, in this case, a tourist attraction that is perceived as risky, will be avoided and tourists' attention will lead to risky behavior (Seong & Hong, 2021).

Chung-Wei Kuo analyzes domestic tourism behavior in Tawain during the pandemic, reaching results that focus on the idea of changing tourism behavior, namely a decrease in the frequency of domestic travel, travel days and pandemic spending (Kuo, 2021). In fact, following the 393 people surveyed, it was deduced that the idea of spending on domestic tourism will not increase or decrease after the pandemic, but there is a possibility that the frequency of domestic travel and the use of public

transport will decrease. In order to encourage the use of public transport, referrals are made to operators, who must engage in disinfection and congestion management activities in order to increase passenger confidence. Regarding external tourism, the trips will be made post-COVID, as in the pre-pandemic period, namely in groups, and this aspect can be understood as a health and collective safety, due to the fact that people in groups know each other. However, foreign tourism will experience changes in the post-pandemic period, and this is highlighted in the much shorter number of days spent abroad, and in the case of expenditures, they are expected to be higher, as a result of changes in the price. flights, accommodation or medical expenses (Kuo, 2021). In fact, another conclusion reached is that of increasing the confidence of Taiwanese citizens in the safety of sanitary measures taken by the government, the author emphasizing the idea of enhancing the internal environment through control measures at the state border.

Our findings on the literature close to the work of JunHui Wang et al., Which discusses the impact of the media on domestic travel in Korea, analyzing three periods, the next three months of the current year. and next year (Wang et al., 2021). More precisely, due to the positive emotional factors, but also to the behavioral frequency of the past, it positively influences the desire to travel in the next three months, while the media has negatively affected this trend. However, the study highlights no causal relationship between the media effect and this year's wishes, and for next year, a positive causal relationship (Wang et al., 2021). The main motivation of the authors would be that at the beginning of the pandemic, the information presented by the media had a strong impact on the population, but with the passage of time and progress in the field of vaccines, but also through the spread of more positive news, a much more "friendly" perception of tourists, regarding travel for tourism.

Against the background of the specialized literature, the authors extracted the main difficulties encountered in the case of various countries, using them as items, in order to understand the changes in tourist behavior in Romania. Thus, we will debate: the lack of reliable information - the response of the media and the political environment; changes in tourist behavior; safety of tourist destinations during the pandemic - implications on the physical and mental condition of tourists.

#### **4. Difficulty of behavioral adaptation during the COVID-19 pandemic. Background: The crisis in Romania**

The desire to return to the times without the present worries, of the possibility to contact COVID-19, aroused the awareness among the population of the world, to organize in overcoming critical situations. At the level of Romania, a former communist country in Southeast Europe, the fight seems to have stagnated in places, with all sorts of obstacles, from people's reluctance to believe in the existence of the SARS-CoV-2 virus, to management problems. political or health situation, and until the collapse of the tourism sector in the fourth wave of the pandemic, when restrictions were again imposed. We must understand that the items to be analyzed in the lines below, whether we like it or not, will be largely related to the evolution and management of the epidemiological situation, because in the end, tourism is conditioned by these factors. The aim of the authors is to identify the main difficulties reported in the social sphere, and through the empirical interpretation, the resulting observations should be reflected in a set of good practices that will help the tourism sector.

#### **4.1. Lack of reliable information - the response of the media and the political environment**

According to an INSCOP survey started between March 5-13, 2019, out of the 1053 respondents, 68.1% claimed that they have the highest trust in the institution of the Army, 55.1% in the Church, and 38.2% in the Presidency, while low values were registered by the Government (13.8%), but also by the Parliament (11.2%) (G4media, 2019). More recent data from the Pandemic, collected between 4-13 May 2021, highlight notable differences. Thus, out of the 1056 respondents, the "much" and "very much" trust was found to be in the case of the Army (69.7%) and the Church (64%), while at the bottom of the ranking, the Presidency decreased in percentage by -12.9%, reaching 25.3%; The government showed an increase of + 11.5%, while the Parliament accumulated 12.2% (Eremia in "Adevarul", 2021). All these data can answer the problem in this subchapter, denoting the fact that, whether we are talking about the management of the vaccination campaign, or information on restrictive measures, health, risks of exposure to the virus and the like, can be disseminated among population, through campaigns encouraged by the institutions that recorded the highest percentages in terms of "high" and "very high" trust. For a better understanding of the phenomenon of lack of reliable information, we need to reflect on the media channels and information transmitted by the political class. For example, in the summer of 2021, when the restrictions had relaxed, the rush to the crowds on the Black Sea beaches was in full swing, and the vaccination rate of Romanians stopped at 25%, the country's prime minister announced on July 28 that: "We have reached the biggest hold. You know that yesterday in Bucharest there was no case in 24 hours. The goal was to eliminate the pandemic, and the goal was achieved." (Lică in "Adevarul", 2021). At the same time, taking into account measures such as mandatory vaccination and imposing the presentation of the Green Certificate upon entering certain institutions or commercial spaces, were actions that again aroused controversy and reluctance, this happening in the fourth wave of the pandemic in Romania. The confidence of Romanians regarding the vaccination against COVID-19 was also presented following an opinion poll conducted between January 13 - February 3, 2021, on a sample of 1,200 people (INSCOP, 2021). The findings were not at all surprising, in the sense that Romanians are prone to trust fake news. According to the same source, social networks have a low degree of filtering of this type of information, and therefore, the findings highlight the following: 35.7% of Romanians surveyed consider rational the theory that the virus is spread intentionally, in order to inoculate the population with vaccination chips; 14% believe that coronavirus symptoms are related to radiation from 5G mobile networks, while 19.3% of all respondents are strongly opposed to vaccination (INSCOP, 2021). However, it would be interesting for such an opinion poll to be conducted in the autumn of 2021, when the political instability in the country experienced a turbulent period. The political crisis on September 1, 2021, overlapping with the appearance of wave IV of COVID-10 in Romania. The lack of accuracy in official statements can be offset by increased attention to expression in the present and future.

We believe that, despite the fact that the COVID-19 pandemic has been present in Romania for almost two years, basic information on the composition and eviction of vaccines is still needed to be promoted among the masses, by sources perceived by Romanians as being safe. In addition, let us not forget that public authorities need to work closely with media institutions to share knowledge and build trust to reduce fear (Cori et al., 2020).

Looking sadly at the tourism sector, we can say that the fourth wave is a collapse that at least 30 days for this sector. By approving Decision 91 of October 22, 2021,

according to Article 4 (1), we recall: "It is proposed that access to all activities and events organized within the 30-day period for which the measures in this decision are proposed, as well as access to shopping centers, accommodation units, restaurants, cafes or other public catering establishments where may consume marketed food or alcoholic or non-alcoholic beverages, be permitted only to persons who have been vaccinated or become ill and who are in the period from the 15th to the 180th day following confirmation of infection with the SARS-CoV-2 virus ". Therefore, in the conditions of the 30 days of restrictions that also affect the tourism sector, against the background of the population's reluctance regarding vaccination and a vaccination campaign that requires incentives, where will we go?

#### **4.2. Changes in tourist behavior**

The works analyzed in the above lines present the perception of the risks of illness as the main reason why tourists have started to make their holidays much safer. Avoiding crowds and maintaining social distance have positive effects that are reflected in the popularity of nature tourist destinations (Donaire et al., 2021) and the practice of eco-friendly forms of tourism. In addition, this is the right time to revitalize and promote ecotourism, that old friend, to whom you have not paid attention for a long time, but who can always be close to you. Escapes in nature and to lesser known destinations are perceived as safe destinations during this period. For example, the recent authors' attention has been focused on the entire motivation of tourists to the ecotourism sphere, from the problems encountered in the case of biodiversity conservation (Cherkaoui et al., 2020), to the motivation to choose safe trips, from the pure reasoning of planned behavior to avoid risks (Seong & Hong, 2021).

In Romania, the trend will be similar, especially during the summer, when, if there are still restrictions, accommodation in nature, in your own tent, can be an alternative for tourists eager to experience forms of ecotourism. However, it is unlikely that this method of accommodation will gain ground in the face of the convenience of a boarding house, for example. However, we are talking about a new "movement" of man to freedom in nature, fueled by the restrictions of travel imposed. Such changes in tourist behavior, which will aim at discovering the natural and social environment, must be thoroughly understood by each one as our adaptability to new rules, because nature must be respected and local communities supported.

#### **4.3. Safety of tourist destinations during the pandemic - implications on the physical and mental condition of tourists**

One study found that each of us has an obligation to reflect intensely on this stage of our existentiality, current decisions on tourism must be made for rational reasons, not leaving nostalgia to envelop our judgment, on the differences between tourism can - pandemic and the current one (Dobrescu et al., 2021).

The travel risks during COVID-19 will be largely aware of the majority of tourists, but without the right to be unequivocal, a good management of tourist destinations also involves ensuring health safety. The fear of illness has brought to light new daily concerns, such as more frequent cleaning of hands with disinfectants, the reduction of human interactions, the focus on the quality of food or accommodation services. First of all, the Romanian tourism sector is one in which its evolution takes place with small steps. Infrastructure is poorly developed and services and staff can often not meet the expectations of tourists. In the current case, of the emphasis placed on health safety, there is a need for a rethinking of the entire national tourist niche, which should meet the requirements. In this way, in the post-COVID-19 period, the Romanian tourism sector has the chance to gain popularity by creating a safety mark,



a kind of "Green Pass" of the tourism sector. There are studies that have shown that the perception of risks in a destination affects the behavior of tourists, especially when safety and health information is taken into account (Zaiton et al., 2021). Concerning the physical condition of tourists, we believe that hiking in nature, for example, can be done in safe conditions, while avoiding human interactions.

## 5. Conclusion

We consider the purpose of this paper fulfilled, the authors detecting and analyzing important problems encountered in the Romanian society of 2021. The way in which the national authorities will continue to manage the health and information crisis will be reflected in the revitalization of the Romanian tourism sector. The measures to be implemented are desirable to be presented transparently, with luxury of details and in a manner as friendly as possible to the public, without being reluctantly perceived by it. Moreover, the population should show patience and calm regarding the decision-making processes presented by the media and the political environment, thus avoiding disturbances that may intensify in various sectors of activity. Romanian tourism will overcome this turning point, but the important thing is the good management of the future moments of crisis. The balance is the one that must be strong between the factors involved: the social, political and economic environment.

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# THE ROLE OF STAKEHOLDERS IN AGILE SOFTWARE DEVELOPMENT

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**Abstract:** *The market for software development projects is dynamic and complex. The stakeholders involved in the software development process come from different organisational positions and therefore have varying interests and expectations from the product. Effective project management practices enable successful on-time delivery of high-quality product. It is essential to identify the stakeholder roles and responsibilities to effectively manage the development practices within the organisation. Elucidating the stakeholder roles will enable stakeholder management via effective communication and sustainable practices that reflect stakeholder interests. This study elucidates the roles and responsibilities of the stakeholders associated with Agile software development projects. The study identifies that for effective stakeholder management practices understanding of the stakeholder roles and interests is vital. Additionally, application of Agile software development methodology would result in successful development of high-quality software solutions.*

**Keywords:** Agile; software development; stakeholders; management; roles

**JEL classification:** O32; M11; M15; C88; D24

## 1. Research Background

Current business environment is complex and evolving as per the market requirements. Owing to this dynamic nature, the providers are compelled to hasten the launch of their new and innovative products into the market. The primary objective of Agile Software Development (ASD) is to help deliver the product on-time and ensure customer satisfaction (Ferreira and Cohen, 2008). With the help of ASD, the product development process has shifted to a more incremental and empirical approach which allows for an easy and immediate change in product development direction (Raharjo and Purwandari, 2020). ASD methodologies such as Scrum, Kanban, and Extreme Programming offer the necessary processes for product development. Several studies indicate that Agile practices help with improving team productivity as well as their contextual understanding of the product. Studies have reported that 71% of the organizations adopt Agile practices for project management and software development (PMI, 2017; Padalkar and Gopinath, 2016; Raharjo and Purwandari, 2020). The most important factor for effective work in ASD is the stakeholder interaction. Proactive stakeholders are necessary for overall success of agile software development projects. This study discusses the stakeholders involved in software development projects and their role in project success.

## 2. Literature Review

Software development is an evolving stream of science with extensive knowledge bank of the practices and theory involved (Sudevan et al., 2014; Raharjo and

Purwandari, 2020). Thus, the project management practices adopted to handle such projects also require similar adaptability (Hitt, et al 2001). The Agile Modeling for software development practices require active stakeholder participation to gain information and feedback on the product being developed and help decide the direction of the development process as well as its prioritization. Studies have reported that the level of understanding among the stakeholders directly impact the project success. Survey studies by Standish group have reported that less than 50% of the software development projects are successfully delivered within the set time, budget, and scope. The outcome of any project is determined by the individuals associated with its development process. Along with poor management practices, poor stakeholder management could result in project failure. The complete software development project depends entirely on the stakeholder's vision and requirements. Therefore, the direction of the project and the process prioritization is solely driven by the stakeholders. PMI defines the stakeholder as a "group of individuals or organisations that are actively involved in the project and whose interests directly influence the project success" (PMI, 2011). The importance of stakeholder management was illustrated by Freeman (2010) through the "Strategic Management: A Stakeholder Approach". Over the years, the changes in the business sector shifted the focus on incorporating the stakeholder needs and interests from a societal and ecological perspective (Waddock and McIntosh, 2009). Increasing number of studies have reported the advantages of stakeholder engagement and importance of co-operation for achieving a competitive edge on the global business platform (Sudevan et al, 2014). Stakeholder engagement targets including the stakeholders in the decision-making process to improve project success (Sudevan et al., 2014). Effective communication between stakeholders associated with the project paves path to sustainable practices that reflect the stakeholders' interest (Sudevan et al, 2014). Thus, with proper stakeholder management practices the direction and progress of the project would improve significantly and result in success. In software development projects its success is based on the product quality and meeting stakeholder expectations. The stakeholders in a software development project range from different corporate positions and thus have different interests in the project. This study will explore the roles and responsibilities of the stakeholders involved in software development project.

### **3. Research Method**

This section characterizes the research method employed for the study. Content analysis of the articles was conducted to identify the myriad roles of stakeholders in Agile software development projects. The study aims to answer: What are the roles of stakeholders in Agile software development projects? The studies that explored the importance of stakeholders in Agile software development projects were chosen for content analysis. The publication date for the selected studies ranged from the year 2001 to 2020. The 19-year timeline chosen was appropriate for analysing the variables (Shaffril et al., 2018).

The study only considered articles written in English language, published in peer-reviewed journals, between 2001 and 2020. All articles which did not fit the selection criteria were excluded. The studies associated with keywords such as "Agile", "Software Development", "Stakeholder", and "Stakeholder Roles" were selected.

#### **4. Results**

Stakeholder in software development projects is directly associated with the product outcome. A stakeholder could be the direct or indirect product user, managers, in charge of operations, product sponsor, developer, or support staff. The stakeholder interests are therefore as diverse as the organisational background of the people involved. Thus, to achieve project success it is necessary to understand the stakeholder requirements to form a cohesive vision for project direction and priorities. If we consider arranging the stakeholders involved in an Agile Software development project in an onion diagram, the product makes up the core of the onion being the most crucial aspect of the project and the stakeholders in layers closest to farthest represent their roles in the product development process. The Users, Support staff and System administrators are primary stakeholders. While, the Technical and User management groups, sales and purchasing group, and the legal group are secondary stakeholders. The sponsors, client, suppliers, regulators, developers, public, and media are the tertiary stakeholders (Caprano, n.d.; Power, 2010). The most involved group of stakeholders are Project Sponsors, Product owner, Product Developers, Project Managers, and Product User. The project sponsors are the external stakeholders as they are mainly interested in the project success. Their role is to organise the financial help necessary for the project. They are also responsible for finding alternatives for project cost overruns. The project owner is the primary stakeholder responsible for setting the goals and business strategy for the project. Additionally, the owner also plays an important role in clearing backlogs to help the team with project direction and prioritization. Developers among other stakeholders are involved in the actual software development process. The development team includes the software designers, product testers and team leaders. Their role is to successfully deliver the software on time and quality estimation of the product. The project managers handle the complete planning and organization so the project is completed within the estimated time, scope and requirements. In Agile software development, the project manager is an integral part of the development process and is responsible for communicating with the other stakeholders regarding the requirements, budget and deadlines of the project. The end user is the target audience for the product. If engaged in a proper manner, the end user can support the development process by testing the product and provide feedback for improvements to the final product (Buchan et al., 2017).

#### **5. Conclusion**

Development of high-quality software solutions requires identification and categorization of stakeholders' roles and responsibilities as they wield influence on the project process and its outcome.

In an Agile software development project, the sponsor has a high influence on the project since they can withdraw the funding if the outcome is not to their liking. The technical and administrative staff on the other hand have minimal influence in terms of project outcome. However, they can significantly influence the project process which aid in achieving said outcome. Hence, for efficient project management, it is vital to identify and interact with the key stakeholders within the project. It would help in estimating the stakeholders' perception towards project decisions. Thus, making it easier to determine their interest and requirements from the product. Effective and cohesive communication among the stakeholders can set the project direction and help in proper prioritization of the product development processes. Application of Agile

methodology enables a productive collaboration of stakeholders for development of specific high quality software solutions.

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## RELEVANT ISSUES REGARDING THE SIGNIFICANCE OF WGI (WORLDWIDE GOVERNANCE INDICATORS) IN PUBLIC GOVERNANCE

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**Abstract:** *In this article I set out to analyze the relevant theoretical aspects at European and global level of the use of WGI in terms of public governance. Currently one of the most common ways to have economic growth and development is based on qualitative public governance, it is a means by which public enterprises/institutions implement the strategy of specialization, vertical integration or diversification. It is particularly important that for stability in all areas of activity there are all elements of good governance, namely: accountability, transparency, efficiency and regulation, thus having a clear correlation between public governance and the economy, investment and development. The aim is to analyze how the decisions taken and ultimately, how the measures are implemented from the perspective of maintaining the values of the rule of law in trying to manage the problems, can directly shape economic growth, precisely because of the impact it has on the key areas of the economy. The idea of this research results from the growing role and influence of public governance in economic growth.*

**Keywords:** Public governance; economic growth; significance; Worldwide Governance Indicators.

**JEL classification:** A14

### Introduction

European literature often links the concept of governance to public administration reform, and thus to change. Although such definitions have the advantage of being dynamic, they also tend to underestimate order, stability, and predictability, which are also central to the concept of governance (Frederickson, 2005). As Frederikson (2005) observes, most elements of public governance such as networks, cooperation, partnerships and contracting are “forms of institutional adaptation in the face of increasing interdependence”. The approach to good governance involves identifying an optimal system of governance, which, through its efficiency, leads to long-term economic prosperity (Keping, 2018). In addition, good governance is an active and effective cooperation between state authorities and citizens, as participants in the public administration process. As Kaufmann et al (2011, p. 2) attest, public governance is measured for each of its six broad dimensions, known as the Worldwide Governance Indicators (WGI), namely: Corruption control; Political stability and the absence of violence; Quality of the regulatory framework; Government effectiveness; Voice and responsibility; The rule of law. WGI's have been determined by the World Bank since 1996 in two ways, namely: In their normal standard units, ranging from about -2.5 to 2.5; In terms of percentage range from 0 to 100, with higher values corresponding to better governance. Through WGI's, there are possible relevant and

basic comparisons around the world in terms of the perception of good governance by citizens in each of the 215 countries of the world for which WGI's are determined.

### **Trends at European level regarding the significance of WGI**

Bayar (2016) examined the impact of WGI's on economic growth in the EU's transition economies, for the period 2002-2013, the results showed that all governance indicators, except regulatory quality, had a statistically significant and positive impact on economic growth. The data also indicated that corruption control and the rule of law had the greatest impact on economic growth, while political stability had the least influence. Badun (2005) investigated the impact of the rule of law and the quality of public administration on economic growth in EU and acceding countries, including Croatia, Bulgaria and Romania, using group regression, finding that both factors positively influence economic growth in terms of concerns transition economies. In contrast, Tridico (2006) examined the impact of governance on the productivity of Polish firms and found that firms located in a healthier governed region performed better. Méndez-Picazo, Galindo-Martín and Ribeiro-Soriano (2012) studied the impact of governance on economic growth in 11 developed countries (Denmark, Finland, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, the United Kingdom and the United States of America) in the period 2002-2007 and found that governance has had a positive impact on economic growth. Beck and Laeven (2006) examined the relationship between economic growth and institutional quality (represented by WGI) in 24 economies in transition between 1992 and 2004, using group regression and found a strong direct link between economic growth and institutional development. Cooray (2009) investigated the relationship between economic growth and the size and institutional quality of governments based on World Bank governance indicators in the context of a neoclassical model in 71 countries, including several EU transition economies in 1996-2003 and found that governance has positively affected economic growth. In contrast, Peev and Mueller (2012) analyzed the relationship between economic growth, democracy and economic freedom by including public governance indicators in a regression of the group for 24 transition economies in 1994-2007 and found a direct relationship between economic growth and the quality of economic institutions. Petreski (2014) examined the impact of institutional quality on economic growth in 30 transition economies in 2005-2011 and found that good regulatory governance had a positive impact on economic growth. In addition to these findings, many empirical studies have been conducted on the relationship between public governance and economic growth for countries in different income groups. Finally, Beleiu, Pop and Țâmpu (2015) examined the impact of governance (represented by WGI) on economic growth in Romania in the period 1996-2013 using correlation analysis and found an extremely positive correlation between both the rule of law and growth as well as between effective regulation and economic growth.

### **Trends at global level regarding the significance of WGI**

Grindle (2007) showed that the individual elements of good governance can be landmarks in the modernization process and are also influenced by each country's own environment, political, economic or cultural. Most studies have focused on the relationship between public governance and economic growth, considered WGI's to measure the level of governance, and generally concluded that the components of public governance have a positive impact on economic growth (Badun, 2005). Graf



Lambsdorff (2005) analyzing the multi-country corruption index (CPI) wants to show us that even if this index has low values there can be no significant economic growth in the absence of a quality of governance, the latter being the main engine growth. Regarding the links between good governance and economic growth, Gill et al (2019, p. 1111) have shown that in developing Asian countries almost all components of WGI act as incentives for economic development by strengthening the state of law, policy implementation and quality of contract execution. In a pioneering study, Kaufmann and Kraay (2002) investigated the impact of governance indicators on economic growth in 175 countries between 2000 and 2001 and found a strong causal link between public governance and economic growth. Moreover, Bouoiyour and Naimbayel (2012) analyzed the impact of governance (represented by WGI) on economic growth in 27 sub-Saharan African countries in 2002-2009 using group regression and found that all governance indicators had a positive impact on economic growth. Fayissa and Nsiah (2013) examined the impact of governance (represented by WGI) on economic growth in 39 countries in sub-Saharan Africa during 1995-2004 using group regression, finding that the composite governance index had a positive impact on economic growth, but also that at the same time, the impact of governance on economic growth changes depending on the level of income. Zubair and Khan (2014) analyzed the impact of governance (represented by WGI) on economic growth in Pakistan in 2002-2011 using correlation and regression analysis and found an extremely negative correlation between political instability and economic growth, a moderate negative correlation between control of corruption, the rule of law and economic growth and a positive correlation between relationship and responsibility and economic growth. The regression results showed that only political stability had a statistically significant negative impact on economic growth. Emara and Jhonsa (2014) analyzed the impact of governance (represented by global governance indicators) on economic growth in 197 countries for 2009 using a two-stage regression with the smallest square and found bidirectional causality between governance and economic growth. These authors also examined the same relationship in 22 countries in the Middle East and North Africa. Marino et al. (2016) explored the link between the WGI and the BRICS countries' socio-economic development indicators (Brazil, Russia, India, China and South Africa). The results suggested a positive relationship between the Human Development Index (IDI) and indicators on the effectiveness and control of government corruption, on the one hand. On the other hand, the implications of the WGI on gross domestic product (GDP) have highlighted a positive impact in terms of the corruption control indicator and a negative one in terms of voice and responsibility, as well as the other indicators of political stability.

## **Conclusion**

Most studies were based on data provided by the World Bank's World Governance Indicators (WGI's) in investigating the impact of public governance on economic growth and generally concluded that the components of public governance have a positive impact on economic growth. Public governance has the power to influence economic growth through many direct and indirect channels, as it is the main determinant of the economic environment and institutions that have a significant impact on decision-making in key areas of the economy. Public governance can positively affect economic growth, contributing to the development of the financial sector, increasing foreign direct investment flows and improving corporate governance, which has a positive impact on economic growth. Consequently, summarizing the relevant findings from the literature, we emphasize that: WGI are the

variables most used to measure good governance, most studies have highlighted the increasing effects of good governance on economic development, each component of the WGI acts differently on economic growth.

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## GOVERNMENT POLICIES APPLIED IN TOURISM DURING COVID-19 PANDEMIC – STUDY CASE: ROMANIA

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**Abstract:** *In a world that faces many changes since the outburst of the coronavirus pandemic that hit the whole world, many sectors of the economy were forced to “stay on hold”. Tourism is one of the sectors that was most affected by the free movement restrictions and other precaution taken worldwide against the spread of COVID-19. For many European member states, regions and cities, tourism is a key contribution to the economic and social structure. This sector generates 10% of EU GDP and represents 12% of the EU labor force, but the crisis caused by the COVID-19 pandemic has caused losses of between 85% and 90% for many economic actors, such as hotels and restaurants, tourism agencies and transport companies. A delicate matter to manage, as this pandemic is, by the countries that relayed on tourism as an important part of their GDP, relaunching tourism was a challenge to overcome.*

**Keywords:** tourism; covid-19 pandemic, governmental policies;

**JEL classification:** Z30, I18.

### 1. Introduction

During history we can see how plagues and pandemics have shaped the way humanity has developed. Because of the impact and, later on, the effects long term pandemics had on the “new world” during history, it can be noticed on the demographic impact. Although the tourism industry is quite vulnerable to many factors that can cause its collapse in different regions, a global pandemic was not mentioned among the factors that influenced tourism so far. As in the near past we can see how terrorism, natural disasters, uprisings and other factors were the main reasons why there existed a tourism crisis, a health related factor was not in the “graphic” for tourism to collapse, especially not worldwide.

An overreaction to pandemic is also one of the reasons for the tourism sector to collapse. Tourism is one of the sectors that was most affected by the free movement restrictions and other precaution taken worldwide against the spread of COVID-19. For many European member states, regions and cities, tourism is a key contribution to the economic and social structure. This sector generates 10% of EU GDP and represents 12% of the EU labor force, but the crisis caused by the COVID-19 pandemic has caused losses of between 85% and 90% for many economic actors, such as hotels and restaurants, tourism agencies and transport companies. A delicate matter to manage, as this pandemic is, by the countries that relayed on tourism as an important part of their GDP, relaunching tourism was a challenge to overcome.

Tourism is the fourth largest export category in the EU and brings collateral benefits to the European economy as a whole.

The pandemic puts the EU's tourism ecosystem under unprecedented pressure. As a result of travel and other restrictions, tourism has gradually ceased to operate in the first quarter of 2020 in the EU and worldwide.

European tourism depends on the possibility for Europeans to move freely within the EU.

## **2. Study case: Romania**

Several EU state members have already taken steps forward, under the temporary framework on the aid adopted in March 2020, to grant direct grants of up to EUR 800 000 or loans or guarantees on very favorable terms for larger amounts; or, in some cases, to compensate businesses for pandemic damage. Issues related to tourism, transport and borders are governed by a complex set of policy frameworks developed and implemented separately at different levels - local, regional, national and at EU level. Cities and sometimes regions are responsible for a wide range of tourism and transport policies. The diversity of the tourist system it is reflected in its governance and challenges, as policy measures implemented at different levels without coordination can be neutralized or even to obstruct each other.

As each EU state succeed in reducing the circulation of the virus, general restrictions on the free movement to and from other areas or regions of the EU with a similar general risk profile should be replaced by better targeted measures, complementing social distancing measures.

As the tourism industry is hoping for an economic recovery, the governments are working on measures to limit the spread of new infections. By the end of 2021 in Romania is expected that 60% of the population will be vaccinated, so the travel limitations will apply to just 40% of the population.

In the whole EU was installed a system called “semaphore”, which depends on the epidemiological situation (infection rate) with green, yellow, and red color labeling the countries based on their infection rate. On 1<sup>st</sup> of June 2021 the European COVID-19 digital certificate or known as “green passport” was introduced, so free movement is possible for the who are vaccinated. Despite the European COVID-19 digital certificate, each country continues to be responsible for defining its own entry requirements and rules, which are not standardized at EU level. That means that in order to enter a country in the EU, a presentation of this certificate depends on the measures and rules in force at the destination.

Taking in consideration that the actual form of organization is the Ministry Economy, Entrepreneurship and Tourism (it has changed its form many times in the past 10 years), Romania never benefited of a clear and stable strategic plan for its tourism development. A solid vision of how the national tourism should develop was never a prior for the government. Even if a master plan for a short-term development was created, it certainly failed due to reasons such as: lack of funding, change of administration, authority, etc.

The latest strategies for tourism development in Romania are:

- development of local communities in areas with a huge touristic potential, by increasing public investment in touristic infrastructure.
- supporting competitive development, by identifying, evaluating and prioritizing forms of tourism and building a network of a internationally competitive tourist destinations.
- developing tourism based on element of national specific and local identity by identifying an integrated approach to tourism policies at a regional level.
- reduction of the VAT rate to 5% for tourism related activities.

Romania's potential as a tourist destination is huge. During this pandemic, the Government and the Ministry of Economy, Energy and Business, adopted on 4<sup>th</sup> of December 2020, an Emergency Ordinance on some measures for providing financial support for tourism enterprises, accommodation structures, food structures and travel agencies, whose activity was affected in the context of the COVID-19 pandemic. The

aid was given to the beneficiaries in the form of grants, in order to partially cover the suffered loss in 2020, compared to 2019, in the amount of 20%. Apart from those measurements, Romania lacks in strategies to support its relaunch in tourism.

### **3. Conclusions**

Although the end of this COVID-19 pandemic it's not seen yet, tourism can survive on a minimum level. Its collapse in the beginning of 2020 and its attempt for "a breath of fresh air" during the summer of 2020 and 2021, showed us that this sector is the most exposed when it comes to an unexpected crisis and it's hard to adapt to changes that take place "overnight".

When it comes to its tourism sector relaunch, Romania lacks in ideas of government policies and strategies. Mainly in Europe now, all EU state members follow quite the same lines when it comes to free movement of the tourists, but each country can have extra requirements and rules on its own.

Considering that the COVID-19 pandemic has already changed the behavior of the mass population, a change in the tourist consumer is expected as well. A post pandemic tourism will be adapted to a different tourist consumer, new strategies and policies will be developed in order to reach it's former potential ante-Covid19 outrage. Taking in consideration that the European Union, as the main tourism destination world-wide, will have new adapted policies for the type of tourism that is developing nowadays, it's sure to assume that Romania will follow its example and try to relaunch the national tourism to be open to more international tourist and help the local authorities develop the infrastructure that it's needed.

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# SHADOW ECONOMY AND TOTAL FACTOR PRODUCTIVITY: IS THERE A RELATIONSHIP?

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**Abstract:** *The paper aims to examine the potential existence of a relationship between the shadow economy and total factor productivity as a macroeconomic factor of production. The research is based on a dataset of 50 countries for the period from 1991 to 2015 and results show that there is an inverse relationship between the size of the shadow economy and total factor productivity. These findings partially explain why in many cases the shadow economy affects economic development negatively. The presented paper strives to promote strong arguments for the formulation of effective economic policies targeting to limit the negative effects of shadow economy on economic growth.*

**Keywords:** shadow economy, economic development, total factor productivity

**JEL classification:** E26, O17, O43

## 1. Background

The shadow economy and the official economy do not exist separately but are constantly interacting. The effects of this interaction have different implications. On the one hand, lower tax revenues, resulting from shadow activities, can lead to poorer public services and smaller public investment. This, in turn, leads to lower economic growth and lower gross domestic product (GDP). However, in times of economic downturn, the informal sector can become a harbour, providing employment and income, in turn raising demand and encouraging production.

In this paper, we examine the potential existence of a relationship between the shadow economy and macroeconomic factors of production for the case of total factor productivity (TFP). The results of the study of this issue can shed light on the specific reasons for the existence of a relationship between the shadow economy and economic development, as well as on the channels through which such a relationship is demonstrated in practice. This would help to better understand the processes of interaction between the formal and informal sectors of the economy, as well as the formulation of appropriate policies to limit the shadow economy. Moreover, such results may be important for analysing the issue of causality in the relationship between shadow economy and economic development.

The research is based on the assumption that there is a relationship between the size of the shadow economy and the macroeconomics factor of production. TFP is examined, representing technological progress. The analysis includes a panel of data for fifty countries in the period 1991-2015. The selected countries are almost all European countries: both EU member states and not, as well as the former republics of the Soviet Union.

## 2. Introduction

Economic theory considers technology and especially technological progress as a key driver of economic growth. However, technology is incorporated in complex ways in



production and the formal expression of the latter is difficult. The concept of total factor productivity (TFP) can be interpreted as the way in which technological progress is incorporated into the production process, as it refers to productivity which is attributable not to a single factor of production but to all of them. TFP is a measure of the ability to employ the factors of production in the most effective way, as to achieve maximum production and research shows that its value grows over time. This growth is fairly logical and can be attributed to the improved quality of equipment, the availability of innovative technologies, but also with the improved qualification of the entire staff. TFP can be also viewed as an indicator of an economy's long-term technological change.

### 3. Assessing the Relationship between the Size of Shadow Economy and TFP

TFP can be calculated by dividing output by the weighted geometric average of labour and capital input with the relevant weighting for the inputs<sup>1</sup>. Respectively, it follows that

$$A_t = \frac{Y_t}{K_t^\alpha L_t^{1-\alpha}} \quad (3)$$

Adopting the neoclassical theory, if the factor markets are competitive, then the marginal product of each input equals its factor price - the wage rate and the rental rate of capital respectively. Under these assumptions the output elasticities  $\alpha$  and  $1 - \alpha$  are capital's and labor's share in total output and the research also relies on the assumption that the parameter is constant over time and we use it to obtain calculations for all of the countries in the sample. The research uses data obtained by the International Labor Organization (2019). According to them the average adjusted<sup>2</sup> labor income share for the region of Europe and Central Asia for the period 2004-2017 is 56%. As a result, we assume that  $1 - \alpha = 0.56$  and hence  $\alpha = 0.44$ . Figure 6 illustrates the scatter plot for all countries under study with respect to the average TFP calculated. Further on the same procedure is put into practice for the other factors of production. After obtaining the annual values of TFP for each country, the average values are calculated for the three periods examined. Then, the correlation between these averages and the average size of the shadow economy for the relevant periods is calculated. The results are presented in Figure 5 and Table 1.

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<sup>1</sup> We use the Cobb-Douglas production function in the context of the Solow Growth Model in the form:  $Y_t = A_t K_t^\alpha L_t^{1-\alpha}$ ;

where where:  $Y_t$  – real GDP in year t;  $K_t$  - capital stock in year t;  $L_t$  - labor employed in year t;  $A_t$  – total factor productivity in year t;  $\alpha$  – output elasticity of capital;  $1 - \alpha$  - output elasticity of labor.

<sup>2</sup> The adjustment takes into account the income received by the self-employed.

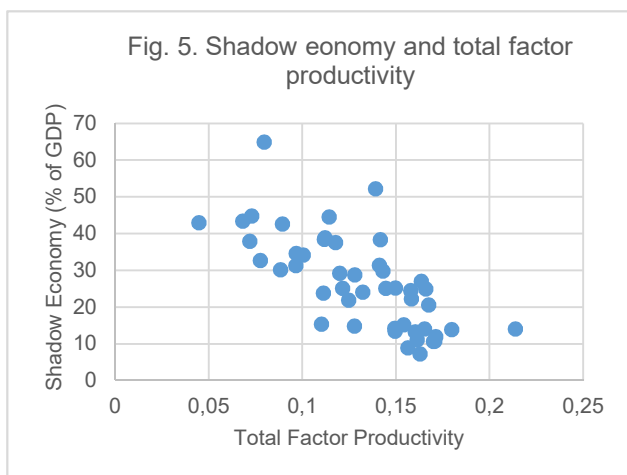


Figure 6: Total Factor Productivity

Sources: Medina and Schneider (2018), Kelmanson et al. (2019), World Bank, IMF, ILO, author's calculation

The scatter plot on Figure 5 is with respect to the average size of the shadow economy and the average TFP for the period 1991-2015 in the fifty countries under study. The figure illustrates a clear inverse relationship between the two variables: the smaller the size of the shadow economy the larger the TFP in a country and vice versa. Countries with small size of the shadow economy like Austria, the Netherlands, and the UK have an average TFP for the period 1991-2015 around 0.16-0.173, while countries with large size of the shadow economy like Ukraine and Belarus have an average TFP around 0.07-0.11. The correlation coefficients in Table 1 confirm the existence of such a relationship. For all three considered periods the coefficients are statistically significant, relatively large and with negative values.

Table 1: Correlation coefficients between averages (p-values in brackets)

Period	Shadow economy and RGDP per capita	Shadow economy and RGDP per capita growth rate	Shadow economy and capital stock per capita	Shadow economy and labor per capita	Shadow economy and TFP
1991 - 2015	-0.829644*** (0.0000)	0.105720 (0.4794)	-0.804053 (0.0000)	-0.293699* (0.0451)	- 0.776015 (0.0000)
1993 - 2012	-0.835992*** (0.0000)	0.322832** (0.0269)	-0.804244 (0.0000)	-0.279155** (0.0574)	- 0.786695 (0.0000)

<sup>3</sup> The size of the TFP depends on the units of measurement. In the current research capital stock is measured in thousands of constant international, 2011 US dollars, while the amount of labor is measured by the number of people employed.

1993	-0.833164*** (0.0000)	0.268849* (0.0672)	-0.804856 (0.0000)	-0.294026* (0.0449)	- 0.783777 (0.0000)
- 2009					

\* Significant at 10% level, \*\*Significant at 5% level, \*\*\* Significant at 0.1% level  
Source: Authors' calculation

#### 4. Conclusion

There is solid economic logic backing this result about productivity. Technology allows state revenue agencies to improve their detection and tracking mechanisms. In some countries<sup>4</sup> all of the cash registers should be directly connected to the Tax Authorities and have fiscal memory of all transactions with the purpose to tackle the practice of tax evasion by not issuing cash receipts. At the same time big data techniques and data modeling allows national revenue agencies to analyze big datasets, which allows them to detect risk behavior better and appoint appropriate further inspections very quickly. Technological progress also encourages the use of electronic money, decreasing the use of cash, hindering shadow activity. The use of electronic money and online banking might be imposed by law, as in many countries making transactions in cash above a certain limit is forbidden<sup>5</sup>. Such a policy measure along with the growing convenience of electronic money puts obstacles in front of conduction shadow activities, limiting the possibilities to hide transactions or record a lesser value than the real one. When public authorities take advantage of technological progress by improving their control mechanisms using innovations, combined with adopting changes in legislation, they can conduct effective policies tackling the shadow activity.

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<sup>4</sup> Bulgaria is one of them.

<sup>5</sup> For Bulgaria payments above 5,000 euro cannot be competed in cash.

# THE IMPACT OF THE PANDEMIC ON WAGES IN THE CONTEXT OF INDUSTRIAL REVOLUTION 4.0

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**Abstract:** *In the context of the Industrial Revolution 4.0 and the COVID-19 pandemic, the labour market faces great challenges. The workforce, especially young people and low or medium-skilled people, is affected by the insecurity that today characterizes the entire society. This paper analyses the evolution of the average net wage registered in Romania for the period 2018 – August 2021, in order to identify how the Romanian labour market adjusts as a result of the shocks caused by the pandemic context that generated a strong recession and the transition to digitalization and technology. The results showed that income from work is rigid to decline. However, by analysing the evolution of the average net wages, one can identify the sector most affected by the pandemic, namely Accommodation and food service activities.*

**Keywords:** wages; labour; pandemic; technological progress

**JEL classification:** J31; E24; O33

## 1. Introduction

New technologies, having an all-encompassing character due to the fact that they can be adopted in countless fields and situations, generate fundamental and irreversible transformations at the level of the entire human society. The way in which companies operate in the context of digitalization and technology and how the labor market undergoes transformations as new technologies are adopted is under constant observation among specialists in social sciences.

According to the academic literature, the development and use of new technologies in economic activities contribute to the reduction of production costs, to the increase of precision, speed, reducing human errors, and being able to function without interruption. In this context, due to the fact that new technologies can perform repetitive tasks that previously were performed by the low and medium-skilled workforce, it is considered that the latter represents the main loser in the transition to technology, the low and medium-skilled workers being under the risk of being removed from the labor market, being replaced by new technologies.

Moreover, lately, both the workforce and the business environment have faced a high degree of insecurity due to the COVID-19 pandemic, which has generated a global recession that can be compared with the one after the Second World War (World Bank, 2020). In addition, due to the need to respect social distancing, digitalization has become for some sectors of activity the main or even the only way to be able to function. In other words, the pandemic context has increased the need for technology. Starting from the hypothesis according to which the COVID-19 pandemic contributes significantly to accelerating the transition of economies to technology on the one hand and, on the other hand, taking into account the fact that, in the pandemic context,

many of the sectors of activity have encountered difficulties, even facing blockages due to restrictions and quarantine, the evolution of incomes is an important economic and social indicator.

Thus, in this article will be analysed the evolution of the average net monthly wage in the short term in Romania, in the period between 2018 and 2021, within the limits of the available data.

## **2. Theoretical Foundation**

The Industrial Revolution 4.0 generates significant transformations throughout society. On the one hand, technology brings benefits for manufacturers and users and on the other hand, it creates insecurity for vulnerable groups. In other words, in the context of the Industrial Revolution 4.0, the quality of life can increase as a result of the contribution of technology and at the same time generate an increase in the rate of inequality and poverty in an economy.

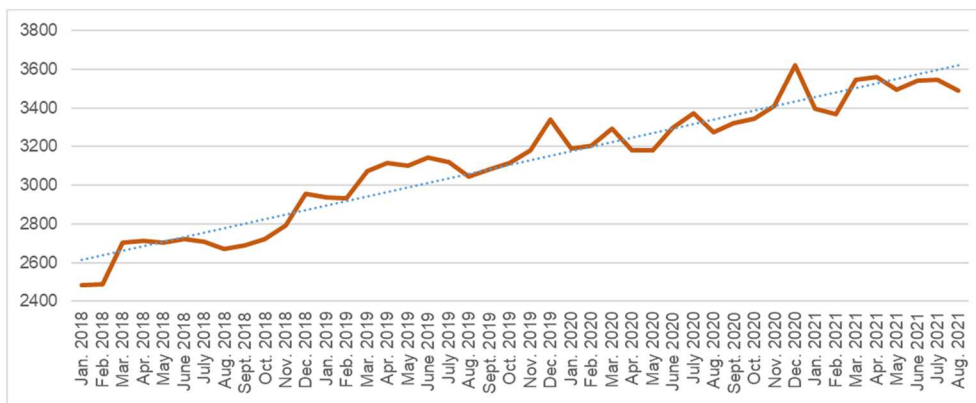
For instance, as a result of displacement effect, in the case of the industrial sector, the employment rate and the average wage decrease in areas where industrial robots are used (Acemoglu & Restrepo, 2020; Chiacchio, et al., 2018). New technologies can also replace the workforce that performs tasks different from physical tasks (Michaels, et al., 2014). Thus, the banking sector, for example, is one of the sectors where new technologies can have a strong impact. The most vulnerable categories in the context of the transition to digitalization are young people and people who are weak and medium-skilled (Chiacchio, et al., 2018), who perform routine tasks that are most easily accomplished by technology.

According to Szczepański (2019), new technologies have the potential to increase the level of income from work for some categories of employees, while the unemployment rate will increase as a result of the effect of replacing the workforce with new technologies. In other words, some economists argue that new technologies are causing the redistribution of wage income from the average and low-skilled workforce to the highly skilled workforce (Korinek, 2019; Mühleisen, 2018), thus increasing the inequalities (Korinek & Stiglitz, 2021) that society is already facing today, inequality being one of the great problems of the world.

## **3. Descriptive Statistics**

In order to verify how salaries have evolved in Romania during the pandemic period so far, the monthly data series provided by the National Institute of Statistics in Romania is used, through the TEMPO database. The data are available until August 2021 inclusively, and are available both at national level and at the level of classes of activities of the national economy (NACE2).

According to Figure 1, despite the unfavourable situation generated by the COVID-19 pandemic, the net average monthly wage in Romania has maintained the same positive trend, a trend that it had drawn in the years before the pandemic. This fact can be explained by the theory of rigidity when lowering the nominal wage. In other words, in periods that are not favourable for economic growth, the adjustment of the labour market is not achieved through changes in the level of labour cost, dimming the income from work.



**Figure 1: Net average monthly wage in Romania (RON)**

Source: National Institute of Statistics from Romania (TEMPO\_FOM106D)

However, if we analyse the evolution of the net average monthly wage at NACE Rev. 2 Classification level, it is noted that the wage in October 2020 compared to the wage in October 2019 had the highest increases (of over 10%) for two sectors: Information and communication and Real estate activities. Thus, the net average wage in the case of the Real estate projector increased by 287 RON in October 2020 compared to October 2019, while in the case of the Information and communication sector it increased by a value of 617 RON, representing the largest increase of the average net wage recorded for this period.

This increase in the average net wage is explained by the digitalization and adoption of technology by companies, causing an increase in the demand for services in the ITC sector on the market, which has led to an increase in the demand for a workforce with digital skills and knowledge in programming, involving also the increase of wages for this sector of activity. Thus, the hypothesis according to which the COVID-19 pandemic accelerates the transition to technology is admitted even in Romania, where the level of digitization is one of the lowest in the European Union.

On the other hand, the only sector of activity for which the average net wage decreased in October 2020 compared to the wage in October 2019 is Accommodation and food service activities, registering a decrease of 142 RON, which represents 7.6% of the value of the average net wage in October 2019. This sector of activity was one of the most strongly affected sectors in the pandemic context, a significant period of 2020 companies having to cease their activity, which explains the evolution of the analysed indicator.

#### 4. Conclusions

Despite the fact that the Romanian economy has encountered difficulties in the pandemic context, there were no significant decreases in the level of the average net wage for the period 2018-2021, except for the Accommodation and food service activities sector. This situation can be explained by the theory of rigidity when lowering the nominal wage. However, most of the time the adjustment of the labour market takes place through the contraction of the number of employees.

Moreover, it is possible that the increase in the average net wage for some sectors of activity was due to the dismissal of young workers and less experienced workers, who were paid lower wages, thus raising the average wage level, without also implying an

increase in the nominal wage for employees. If this hypothesis is demonstrated, Romania will face a rising poverty rate and implicitly with an even higher level of inequality than the one recorded so far.

Thus, taking into consideration these implications, it is important to extend the present paper with an analysis of the evolution of the number of employees in the last four years for Romania, which would be subsequently correlated with the evolution of the net wage.

## 5. Acknowledgements

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## REFERENCES ON THE CONSTRUCTION AND PROMOTION OF THE TARGU - JIU LOCALITY BRAND ONLINE

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**Abstract** *This paper aims to address a topical issue given that the virus COVID-19 outbreak has had a devastating impact on the global economy and jobs, and the tourism industry has been hit hard by measures to be taken to counter the pandemic. being unlikely to return to normal in the near future. The paper aims to provide a model for applying the principles of place branding together with public relations techniques in the online environment. The role and advantages offered by online communication tools, especially through social networks, will be presented, the characteristics to be taken into account in the strategic management of the brand of a place in the online environment, exemplifying ways of building, communication and virtual environment of Târgu Municipality brand. - Jiu, Gorj County. It is necessary to think and implement a coherent and integrated communication project that has a major impact and contributes to achieving concrete objectives. Thus, the virtual communication with potential tourists through facebook, instagram, youtube and wordpress blog, has as main objective the increase of notoriety and the improvement of the image of the locality after a long period in which it had been forgotten.*

**Keywords:** brand; crisis; digitalization; social media; tourism; travel.

**JEL classification:** Q01, R41, Z30, Z32.

### 1. Introduction

Even after the gradual lifting of containment measures, HORECA companies surviving the crisis will continue to struggle during a phase of recovery that promises to be slow.

The effects of COVID-19 (both for medical and economic reasons) have led to a number of constraints, opportunities and costs on the labor market. Optimistically calculating the opportunities, we can say that one of them is the rethinking of business strategies in order to address more national needs, supporting innovation, especially in areas of national interest: agriculture, food industry, tourism, IT.

The crisis has accelerated digitalisation and highlighted the consequences of the digital divide for certain segments of society, especially women. Independent vocational training and digital literacy are needed for those working in the tourism sector, especially for women and young people, to increase their ability to use digital tools and online resources to streamline their operations and provide flexibility over time. preparing for the future of work.

### 2. The importance of the online environment in promoting a destination

Roig et al. (2010, pp.121-122) argues that the formation of tourists' perceptions of a locality / destination can be influenced through the virtual environment as much as through well-known communication methods.



The online tourism market in Romania has exploded recently, with travel agencies starting to explore the virtual space in order to present offers.

As Govers (2015, p.74) states, places are "virtual phenomena" and most place brands remain virtual for most (except locals and tourists who have come to experience them in physical form).

It is quite difficult to find in the literature a unitary definition of what social media means, but they are based on and can be assimilated with web 2.0 technologies (blogs, wikis, mashups, RSS, podcasts, vlogs and website social networks).

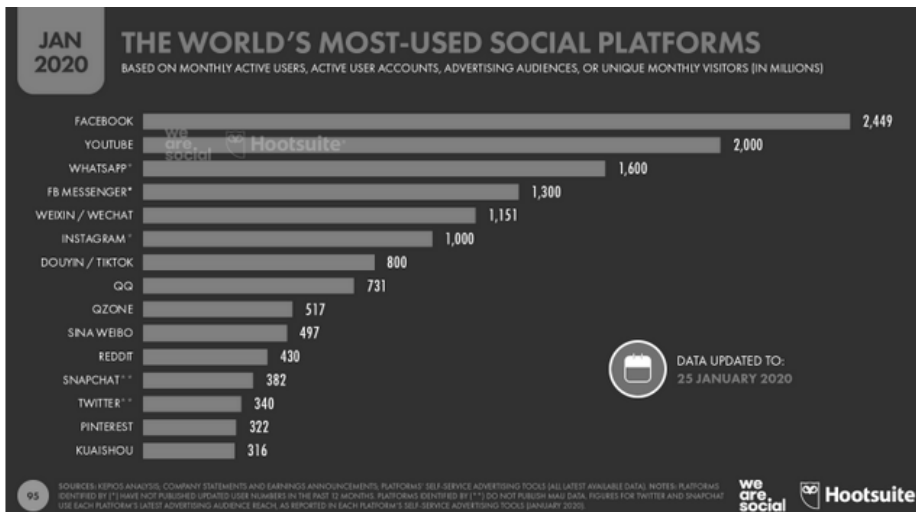
Digital space through secondary channels such as blogs, social media platforms, search engines and mobile platforms, the latter having a very important potential for promoting the locality, providing information adapted to the user's location: facilities and services, information about transport local, guided tours, events, restaurants and shopping malls.

The website is a means of presentation and a tool to increase the notoriety of the place, to transmit the identity at a visual level (name, logo, colors, images), to promote services / products and contact details for the interested public. It is also a source of information for the media, so the texts must be designed in accordance with the rules of writing, and the information must be formulated carefully because they can be taken as such and disseminated. Their content can be developed for different categories of audiences. To be competitive, a website must provide structured and up-to-date information to the key audience, providing practical and useful information, being an operational tool with an essential representation function.

Of all the tools of virtual space, Facebook is the most popular social network. Hootsuite and WeAreSocial published an interesting report on the use of telephones, the Internet and social media in early 2020. According to them, 4.5 billion people use the Internet, while 3.8 billion use social networks. It stated on its own profile the mission that is "to give people the power to build communities and make a world closer and more interconnected."

Web 2.0 technologies can be defined as an "interconnected platform that gives the user control in creating, designing, improvising and disseminating content and other services", one of their basic features being "collective intelligence", according to Sobaci (2016, p .5).

In the case of local branding, social media offers real opportunities for communication both between the brand and the target audience, as well as between individual users interested in a place.



**Figure 1.** The most used platforms worldwide

**Source:** <https://digitaltreemarketing.eu/2020/03/04/digital-2020-report-despre-utilizare-internetului-si-social-media/>

### 3. Building the local brand in the online environment

The favorable image of a region has a direct impact on trade, investment and tourism throughout the country. In order to reiterate and support the idea that the country brand includes under its umbrella the brands of regions, to identify to what extent the perceptions of residents in different regions of Romania regarding each region helps to build its identity and image, and to develop strategy marketing of the destination, between June and September 2020, was applied in three existing tourist information centers in the Oltenia area (Călimănești, Horezu and Târgu-Jiu), a perception questionnaire. The sample was 594 questionnaires, of which 548 were valid. We eliminated the questionnaires in which the socio-demographic data were not completed. Tourists had the opportunity to complete the questionnaires at various accommodation units and near the tourist attractions.

The research aimed to restore the importance of the Brancusi brand, as a well-defined image and identity in the city of Gorj, trying after the analysis and questionnaire applied in conducting research on the three tourist information centers in the area to draw with other specialists in branding and branding. a strong image of the Brâncuși brand that cannot be built only on images transmitted externally but needs to incorporate the direct experience supported by infrastructure, projects, events, initiatives for the aggressive promotion of the Brâncuși sculptural ensemble in parallel with the development of the place in order to build an original, sustainable image of the brand under investigation.

Data processing and analysis was performed in the IBM SPSS Statistics Subscription program.

To the question regarding the online information sources that the people participating in this study used to obtain information about the holiday destination, we were given the opportunity to choose from 5 answers: social networks, blogs, websites, forums, tourism fairs.

It is found that most of the tourists participating in the study (39%, n = 214) place great trust in the information acquired through websites, and 31% (n = 170), are based on recommendations obtained through social networks. Forums are among the preferences of respondents in a percentage of 21% (n = 115), and 7% (n = 38), of tourists said that blogs are an important source of information about the holiday destination. A small percentage, 2% (n = 11), of the people participating in this study, is based on the recommendations obtained through tourism fairs.

To the question regarding the website that the tourists turned to in order to obtain information and suggestions for visiting the tourist objectives, we offered the possibility to choose between 5 answer options: trivago.com, tripadvisor.com, infoturism.ro, booking.com, via-romania.ro, to which is added the possibility to exemplify another source of web information.

Following the centralization of the data, it is concluded that the greatest confidence in the information acquired after consulting the websites by the surveyed tourists is given to the site booking.com, not less than 41% (n = 225) of the participants in the study they showed their affinity for it. Also among the respondents' preferences, 38% (n = 208) is the tripadvisor.com website, a world-renowned site that provides visitors with information such as suggestions for visits, but also for denouncing incorrect practices, becoming a symbol of quality for units that receive positive reviews and display this symbol as a guarantee of customer satisfaction. On the third place in the preferences of tourists is the website trivago.com with 13% (n = 71) of the answers, followed by two Romanian websites, infoturism.ro with 4% (n = 22) of the answers and via -romania.ro with 3% (n = 17) of the answers. 5 tourists, 1% of the respondents chose another source of web information.

#### **4.Tools for online promotion of Târgu - Jiu**

A place's reputation can be a crucial factor in attracting and retaining resources. Just like a trademark, the brand of a place needs to be managed professionally. If it is neglected, it can be distorted or damaged by the information that is transmitted through the communication channels.

The virtual image of the city is a positive one, lately the tourism promotion activities have become more and more intense. The public authority thus recognizes both the need to make concrete investments and to promote local tourism. The most well-known web sources for promoting the city: <https://www.booking.com>, <https://www.tripadvisor.com/>, <https://www.directbooking.ro>, <https://www.trivago.ro>, <https://travelminit.ro/>, <https://www.turistinfo.ro>, <https://www.123travel.ro>, <https://www.infotravelromania.ro>, <https://www.descoperimromania.ro>.

Tripadvisor is a sharing site based on the desire of users to share their experience with others, providing other visitors with information such as suggestions for visits, but also to report misconduct. Due to its notoriety and the large community involved, it has become a symbol of quality for units that receive positive reviews and display this symbol as a guarantee of customer satisfaction.



**Figure 2.** Targu Jiu Tripadvisor-Explore web source

**Source:** <https://www.tripadvisor.com/Tourism-g1598788-Targu-Jiu-Gorj-County-Southwest-Romania-Vacations.html>

In the age of the Internet, tourism sites and blogs, video-sharing channels (youtube) and social networks, public reviews have a very important impact in defining the brand image. The rating of Târgu - Jiu on the tourism website [www.booking.com](http://www.booking.com) was 8.15 (good). Visitors who gave high marks (10-8) mention the strengths: the beauty of the natural setting, the special attractiveness of Constantin Brâncuși's works, the city center, museums and art galleries, very good food at the Restaurant "La Boeru", it is recommended walking, fresh air and relaxation. Critical comments with low grades (7-6) referred to: the neglected appearance of the city, dilapidated buildings, reduced opportunities for spending time, entertainment and leisure and the lack of general promotion of the city's attractions.

The youtube channels created refer to all the important aspects that make up the brand of the city of Oltenia. Approaching topics known to the general public, but which did not receive enough attention (eg Constantin Brâncuși Monumental Ensemble). Created in 2011, the youtube channel "TARGU JIU - The city of Constantin Brancusi", today reached 10,004 views and 1.79 K subscribers. At the same time, the "Images from Targu Jiu" channel, created in 2009, today has 14,458 views and 1.26 K subscribers. Both create a strong image, originating from the local brand, the Brâncuși brand being the soul of the city of Târgu - Jiu, the one that becomes our landmark in the national and world tourist space.

Regarding the Internet presence of Târgu - Jiu City Hall, it has a new website, rebuilt in 2010 [www. http://www.targujiu.ro](http://www.targujiu.ro), with a complex structure, attractive graphics and which addresses all aspects of information of local interest, projects, investments, tourism.

In 2019, the City Hall of Târgu Jiu, through the Department of Tourism and Cultural Events and the National Center for Tourist Information and Promotion "Constantin Brâncuși" launched a useful application for mobile devices.

Târgu Jiu CityApp, works on Android and IOS platforms and was created by one of the largest companies in the international arena - Schubert & Franzke, being selected options in two languages (Romanian, English) that can be changed from the application menu, and its installation is free.

The application is useful both for locals who want to get information about hotels and guesthouses within the city, sights, restaurants, bars and other catering establishments, institutions, shops, local public transport, and tourists who intend to visit the city of Târgu - Jiu. Also, all points of interest contain details such as: images, text, address, phone / mobile phone with direct dialing, email address with the ability to send messages using the phone's email function, website, schedule, location on Google Maps and navigation options. Filtering options can be used, depending on the type of point of interest.

## 5. Conclusions

In addition to the promotional tools of the local administration (books, leaflets, views, posters, souvenirs), the existence of websites, facebook pages of accommodation, food and leisure units, is important because it multiplies the presence of the city's brand in the online environment.

The brand of a place in the information age, which uses social networks, has both benefits and challenges in terms of the ability to control the image it projects on the outside.

Online communication channels that have special features compared to those traditional branding (brochures, flyers, posters, mock-ups in the press, street advertising, etc.) being interactive, accessible and widely available that integrates marketing communication with commercial transactions and services.

This creates special relationships with individuals and organizations that are stakeholders in a place, their interest focuses on attracting, cultivating and empowering community members who are loyal to the place, provide constructive feedback and become true spokespersons. of the local brand.

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# ROMANIAN LABOR MARKET AND INTERNATIONAL MIGRATION: AN INTEGRATIVE APPROACH THROUGH THE LENS OF THE COVID-19 PANDEMIC CRISIS

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**Abstract:** *This paper emphasizes and analyzes the challenges that the Romanian labor market must cope with considering an upheaval emigration and the current crisis generated by the Covid-19 pandemic. The focus is particularly placed on how migrants are advancing on the Romanian and the European Union labor markets in pandemic and post-pandemic times. The research also examines the main effects of the Covid-19 pandemic crisis on the labor market and the disruption of the already known situation and evolution of migrants, identifying the shaping factors and modelers of the migration decision before and after this social, sanitary and economic crisis. Main findings of this research are meant to update the specialized literature with new data captured through an extended empirical analysis based on multifactorial regresion models and spatial analysis (lag and error models) on Romanians' reasons of emigration, with a keen focus on the changes and challenges brought for the labor markets in the context of the Covid-19 pandemic.*

**Keywords:** Romanian labor market; international migration; Covid-19 pandemic; spatial modelling; European Union.

**JEL classification:** F22; F63; R23.

## 1. Introduction

This topical research subject is conducted by the current study due to the recently worldwide ongoing crisis, whose effects and consequences every individual must face, effects also induced at the national level, in Romania, which are definitely the results of the Covid-19 pandemic propagation, coming with a lot of important implications on the labor market. The restrictions and confinements implemented by the authorities in order to prevent the spread of Covid-19 imposed a quick reorganization of the labor market. In this case, Romania needed to reorganize its labor market from the perspective of labor supply and labor force availability during the latest pandemic months and also post pandemic, with a close attention to particular work areas that will be exploited in the future, in the globalized digital economy.

This research also brings into discussion an important issue which Romania confronts to, namely the issue of migration and migrants, the causes of the labor force departure in order to work abroad and most important the consequences of this decision, knowing that an impressive number of migrants decided to return to Romania due to the Covid-19 crisis and their return had a significant impact on the labor market as well.

The current research aims to identify and analyze the effects generated by this pandemic on labor migration from Romania, on the unemployed people in the country and also on the possibility of the digitalized labor market to become viable for most

Romanians, given Romania's evolution in this meaning so far. Based on officially reported statistics, in the next months will be revealed the real effects generated by the pandemic, analysing the efficiency of the measures imposed by the government and their effectiveness in reducing the negative impact induced by the pandemic. Moreover, a topic of interest highlighted in this paper focuses on Romanian's labor market recently recorded changes in terms of influencing factors acting on it over the last years, diversity, importance or degree of influence.

## **2. Brief literature review**

The accession of Romania to the European Union in 2007 and the expanding process of globalization opened a gate of unlimited opportunities, most of them being related to the possibility of travelling and working abroad, in a word the possibility of international migration. This expanding phenomenon suffered a shock beginning with 2008 due to the global economic crisis, making people change their behaviour in terms of moving from a country to other for various reasons, but most important in order to find a job. Such events as those ones mentioned above have had a strong and brutal impact globally and also, in case of Romania, the unfavorable points and the weaknesses existing at that moment became more and more accentuated, revealing that, for Romania, the unfavorable results registered in the economic fields predicted also an unfavorable future from the perspective of these fields, a future that probably will not be able to support any valuable and positive return and improvement of the situation, or at least not a major one. The weaknesses became deeper in the context of the labor force movement through the regions of the country but most important from the country to other states. In this case of a precarious economic situation negatively supported by the international migration and the impact of Covid-19 for Romania became mandatory to implement measures that could save and also regenerate the national economy following the global crisis and the pandemic crisis, measures meant to improve the situation of unemployment and to solve the problem of migration and measures also meant to support the alignment of the national economy of Romania with the economic performance of other Member States of the European Union in the context of Covid-19 and the globalized and digitalized economy.

International migration is known as a complex phenomenon which has robust socio-economic and demographic consequences on migrant sending and receiving countries around the globe (Popp et al. 2019; Marois et al. 2020). The labor force migration, as a dynamic and a versatile process, enhances a lot of relevant challenges for the world economy, consisting in both benefits and drawbacks, especially in the times governed by the COVID-19 pandemic crisis and the inevitable and quickly forced shift towards the era of a globally digitalized economy, which implies the creation of many online jobs and the disappearance of others.

The increasing number of active Romanian people who choose to leave the country following their will of looking abroad, on other labor markets, for jobs fitting their expectations became an issue of real interest for the authorities in the last few years, the government being involved in several programmes meant to reduce this number and to offer work opportunities for Romanians at the national level. The active people from Romania made their decision of leaving the country to work abroad when the available jobs on the Romanian market no longer coincided with their job demand and considered that the labor market from another country met their demands, such a decision being also based both on a series of shortcomings, needs and opportunities. When it comes to the labor market a fact that should not be omitted refers to the component and the structure of the labor force in a country. Following this fact it is



necessary to distinguish between the citizens of a country participating in a way or another on the labor market and the existing immigrants in that country, whose integration into the labor market has already taken place or will take place in the next months (Hardoy and Schøne 2010; Bevelander and Irastorza 2021).

The issue of the migrants is one that the government must seriously take into account, in order to involve them in an active way in activities on the labor market, and to support their own country's economy also in the context of the pandemic and beyond. Moreover, in a close relationship with the actual pandemic crisis it must be admitted that at the global level, the decline of the labor market can't be ignored or neglected, so that the responsible authorities in each country has resorted to various methods that were meant to restore the balance on the labor market in the short or medium term (Barbu and Ponea 2019).

Based on literature previously published facts, migrants usually face discriminations on the labour market so that their access to quality and well paid jobs becomes difficult (Falcke et al. 2020; Vianello and Toffain 2020). This also happens in the context of job seeking when the majority of migrants prove to find only seasonal or low skilled jobs, usually working in construction or agriculture. Coibion et al. (2020), using some preliminary indicators willing to quantify the impact of the Covid-19 pandemic on the global economy, show some dramatic declines in employment, highlighted by a decrease of 20 millions in the number of workers, and also a wave of early retirements, ended with negative effects on the economy.

Moreover, the authors focus on the current idea that most of the people who lost their jobs due to the pandemic health crisis are not looking for a new job. In order to record an increase of the employment rate in the next period, it is imperative necessary for active people to adapt to the new requirements and particularities of the labor market, following the latest trends of digitalization and focus towards a digitalized labor market. This area will gain at the worldwide level a special importance in the future and will become absolutely necessary to be known and understood by the new young generations of people with right capacity of work, who will want to become active and productive on the labor market in the next few years, such fact being available both for those citizens who have lived permanently in Romania and for international migrants, those who have recently arrived from abroad.

### **3. Concluding remarks**

Considering the facts mentioned above and the nowadays existing challenges, this paper explored the particularities of the Romanian labor market and evidenced the effects induced by the pandemic crisis and also the effects in terms of the international migration. As the authors Pouliakas and Branka (2020), Fana et al. (2020) emphasize in their writings, there had been seen a growing importance of the digitalized labor market, e-commerce, a permanent changing consumer preferences for goods and services and a significant impact of employment, unemployment and ways in which individuals work determined by the social distancing measures that the governments imposed in order to defeat the virus spread through at the global level.

The direction in which the European economies will move in the next months and years would definitely be focused on the digital labor market, which is specific to the IT sector and telecommunications industry, allowing people to work in much safer conditions, adapted to the times, conditions that would prevent the spread of the virus, also ensuring compliance with regulations in this regard.

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# THE EVOLUTION OF RAILWAY TRANSPORT INFRASTRUCTURE IN ROMANIA AFTER 1990

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**Abstract:** *The purpose of this paper is to analyse the evolution of the Romanian railway infrastructure based on data extracted from EUROSTAT. The timeframe chosen for this study is between 1990, when data became available after the fall of the communist regime, through 2007 when Romania became a member of the European Union, until 2019. The Romanian railway infrastructure is analysed and compared with those from other European countries, thus, finding that it is one of the largest railway networks in Europe but one of the most economically inefficient, having transported decreasing amounts of goods over time. It lacks investment in electrification of railway lines and shows a high number of victims each year making it one of Europe's most unsafe railway networks. The paper includes recommendations for public policies regarding the transport infrastructure sector.*

**Keywords:** Romania; transport infrastructure; economic development; railway network; transport policies.

**JEL classification:** F63; F68; L92

## 1. Introduction

The transport infrastructure acts as the backbone of the economy. It facilitates the movement of goods and labour force, and it encourages private investment and trade. The importance of transport policy and investments in transport infrastructure has been long debated (Aschauer, 1989; Easterly & Rebelo, 1993). Herranz-Loncan (2007) has showed that there is a positive correlation between infrastructure investments and economic growth. Some argue that the positive correlation depends on development strategies, good policies, and optimal political and institutional climate (Meersman and Nazemzadeh, 2015). Other approaches can be optimistic in theory but might be hindered in practice by factors such as corruption, which can distort the results of a 'master plan' (Cieslik & Goczek, 2017).

The aim of this paper is to analyse the evolution of the railway transport infrastructure in Romania in the past 29 years, based on statistical data from EUROSTAT and to suggest some policy recommendations.

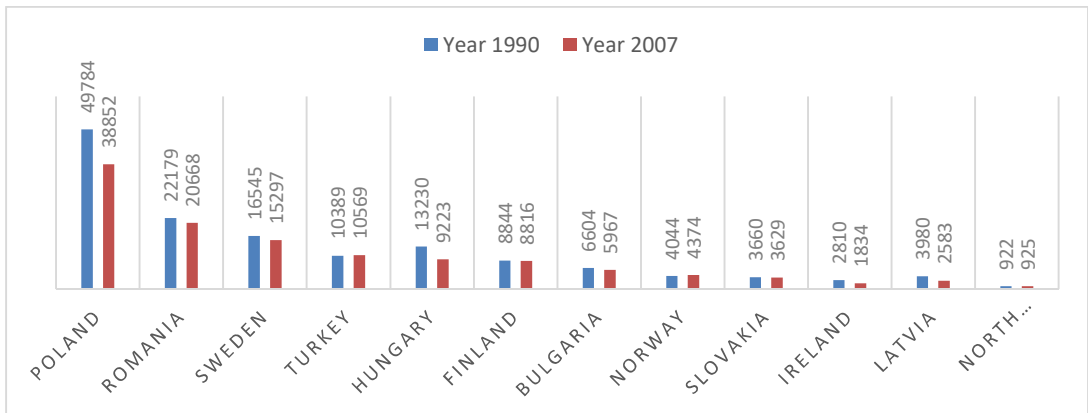
## 2. Evolution of the Railway Network, Safety, and Transport Management Systems

The first data analysed is the length of the railway network. Due to the lack of data from certain countries we made two graphical representations: Figure 1 to show the evolution of total length of track from 1990 to 2007 and Figure 2 to show available data from 2007 to 2019. In 1990 Romania had a total length of the network of 22.179 km and in the following 17 years it reduced by 1.511 km to a total of 20.668 km. It further reduced by another 589 km after Romania became a member of the European Union (EU). Romania has one of the largest railway infrastructures in Europe but also

has one of the largest decreases in total length of railway network (EUROSTAT, 2021 a).

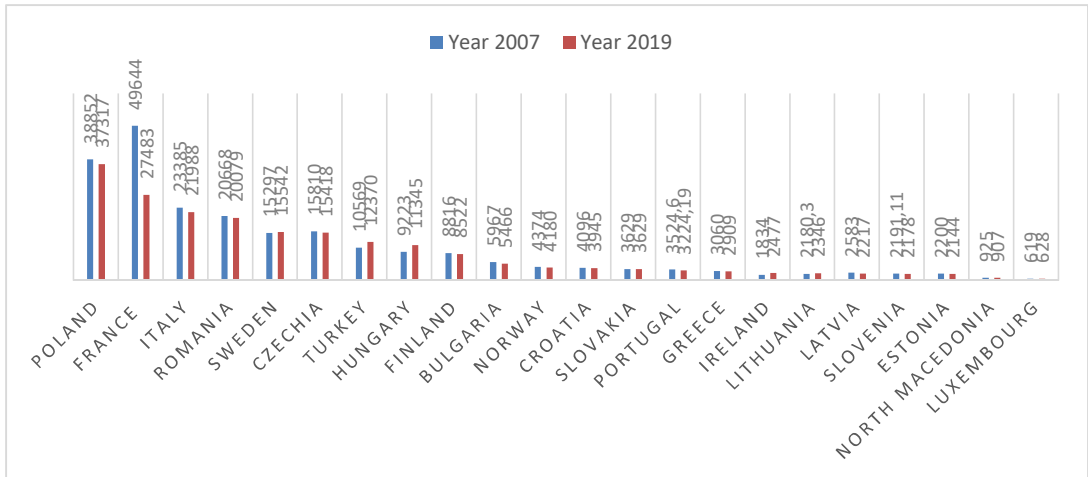
In 1990, Romania was 2<sup>nd</sup> after Poland in terms of length of railway network but in 2007 as more data have been recorded, the statistics expanded to 25 European countries and Romania placed 5<sup>th</sup> being overtaken by Italy, France, and Germany. Romania is then to hold this position in the top ranked railway networks in Europe until 2019 (Figure 2).

In order to analyse the modernisation of the railway infrastructure we computed the percentages of increase in length of electrified railway tracks and compared the electrification process in different countries. The total length of Romanian electrified railway tracks in the year 2019 is 4.029 km, representing 20.06% of the total network. We compare this value with the one from 1990, which is 3.680km to conclude that 349 km of railway tracks were electrified in a 29-year time frame, representing a 9.48% increase. If we rank the countries percentage wise then Romania is positioned 18<sup>th</sup> and if we rank them in terms of kilometres electrified then Romania is ranked 13<sup>th</sup>, either way it is ranked towards the end of the list which is a sign that investments in modernisation of the railway system have not been at its peak in the chosen timeframe (EUROSTAT, 2021 b).



**Figure 1:** Evolution of length of tracks (km) in some European countries from 1990 to 2007

Source: author's own computation based on EUROSTAT data (RAIL\_IF\_TRACKS accessed on 01.11.2021)



**Figure 2:** Evolution of length of tracks (km) in some European countries from 2007 to 2019

Source: author's own computation based on EUROSTAT data (RAIL\_IF\_TRACKS; accessed on 01.11.2021)

Safety is at the core focus of railway transportation since accidents have shown trains can produce catastrophes with either human casualties or environmental damage, thus we shall extend our analysis to the data referring to traffic management systems and victims in railway-related accidents. In 2019, in terms of Track-Based railway traffic management, Romania is ranked 8<sup>th</sup> out of the 12 European countries with recorded data, being surpassed by countries with smaller railway networks like Bulgaria, Belgium and Slovenia. In terms of Radio-Signal railway traffic management, Romania is second to last being furthermore surpassed by Netherlands and Austria, thus, placing Romania at the end of the European rankings in terms of traffic management systems and implicitly railway traffic safety (EUROSTAT, 2021 c).

In 2007, when Romania become an EU Member State, Romania was ranked 3<sup>rd</sup> with a total of 371 victims in railway related accidents. In 2015, already having the possibility to make certain investments to improve the traffic managements systems with financing from cohesion funds, Romania is still ranked 3<sup>rd</sup>. The number of victims has reduced to less than half, with 150 victims in 2015 but almost half of the victims suffer fatal injuries. This makes the Romanian railways some of the most dangerous in the EU (EUROSTAT, 2021 d).

### 3. Romanian National Railway: Employment, Investments, and Transported Goods

It is popularly known in Romania that during the communist administration many people were employed by the National Railways Company, but it is impressive to find that 247.659 people were working for this publicly owned company in 1990. This represents 1.06% of Romania's population in that year. This placed Romania 2<sup>nd</sup> in the European rankings, with more railway workers than Germany, France, or the United Kingdom. In the years that follow, we noticed a steep decrease in these numbers with almost 50.000 people less from 1990 to 1991. In 2008 there were 41.520 employees showing how in a timeframe of 18 years, more than 200.000 people ceased to work in this sector (EUROSTAT, 2021 e).

Data regarding expenditures on maintenance of the Romanian railway network is scarcely available so we cannot do an analysis on this subject. We only have data covering a couple of years out of the 29 that we are observing. All expenditures recorded add up to 13.8 million Euro with its peak in the year 2004 when data shows that the Romanian Government spent 6 million Euro on railway infrastructure maintenance. The situation is similar with data regarding investments. All investments that are on record add up to about 2 million Euro and they cover 10 years out of the observed 29. The lack of data in this segment leaves room for further additions to the research (EUROSTAT 2021 f).

Data regarding the transportation of goods is only available beginning with year 2004, so it does not cover the whole timeframe established for this paper, but it is enough to observe the tendencies. In 2004 a total of 72.738 thousand tons of goods were transported by train in Romania, and this amount decreased through 2007, to 68.772 thousand tons. The numbers went down until 2009 to reach a total of 50.595 thousand tons. The transport of goods has stabilised at around 55.000 thousand tons per year for the decade to come only to reach its lowest point ever recorded in 2020, 49.670 thousand tons. Overall, we see a decrease of more than 31% in the transport of goods on Romanian railway in the past 14 years alone (EUROSTAT 2021 g).

#### **4. Conclusions**

Increase in mobility is based on investments that fall under the responsibility of public administration and the allocation of public funds is always subject to argument if they should be allocated in favour of economic or social purposes (Fedderke et al., 2006). We already know the Romanian railway network had a large social scope during communism. Even so, the world changes, democracy has prevailed in Romania, and the economic efficiency of this sector of the transport infrastructure is imperative. By opening to international trade and the international market, the local economy can benefit through the attraction of foreign direct investments or other collaborations with neighbouring countries, thus not only stimulating economic relations but also people to people bonding (Wang, 2020). The imports and exports are directly affected by the transport infrastructure performance thus a reduction in goods transported should not be accepted. Suitable strategies must be put in place to stop this trend as soon as possible (Yang et al., 2020).

Due to the lack of electrified lines, diesel locomotives still pollute some of the last virgin forests of Europe. Private railway operators have emerged in the past years and this private involvement in the railway industry should be stimulated by the authorities by creating the optimal platform for it to flourish. A good management with a clear investment strategy should generate an impressive return on investment for the Romanian railways. Considering the optimal geographical positioning, the already extensive railway network and the financial support of the European Union, Romania should have its path paved in the years to come.

Romania should implement safety standards that could mandate the infrastructure operator to invest in traffic management systems. An infrastructure 'master plan' should be put in force for the electrification of railway tracks, with focus on main transport routes and on routes passing through national parks or protected areas. European Cohesion Funds for large infrastructure should be a primal focus, to invest in modernisation of lines and digitalisation to reduce the delays as much as possible, hence facilitate optimal conditions for the transport of goods.

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## IMPLEMENTING AN ERP SYSTEM IN A HIGHER EDUCATION INSTITUTIONS

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**Abstract:** *This paper follows the importance of implementing an ERP system in a higher education institution. Enterprise Resource Planning is a system that can centralize a large volume of data, providing any necessary information in real time. At this moment, in Romania, most higher education institutes operate with a lot of bureaucracy and work with a very large database. Often documents are centralized in physical format, on paper, in files, and very little in the electronic environment. Most requests and solutions are made physically on paper. This thing affects the environment quite a lot. The first objective of this paper was to demonstrate that this system comes with the innovative idea of real-time data management, providing support for all school employees, thus eliminating the bureaucracy of physical documents. Another objective was to analyse and interpret the perspective of respondents, employees / employers who work in the private or public field. The research was carried out in Romania, being of a qualitative type. With the help of this research, I wanted to highlight the importance of the subject to the academic environment and I also wanted to analyse the perspective of the respondents about the debate in question.*

**Keywords:** Enterprise Resource Planning; Higher Education; Qualitative research; Academic Environment;

**JEL classification:** A10, I23, M40, P42

### 1. Introduction

This paper follows the impact of ERP system in higher education institution. The article is divided into two parts. The first part presents and deepens theoretical aspects related to ERP systems and the university education system. The second part presents a qualitative case study, based on the presentation of an interview.

At this moment, in Romania, in the public system, respectively in the higher education system, there is a lot of bureaucracy. This bureaucracy often includes a lot of acts, documents, files and they are very harmful to the environment. In most cases, the higher education institutions secretariat does not work on the basis of online applications. They usually work with physical documents. University documents usually include the history of all current students and graduates, and even exact data related to the institution's employees, teachers, and administrative staff. The second part of the paper follows the vision of Romanian respondents over the current issue addressed. The current interview was conducted with 5 people. Subsequently, the answers offered by them are presented, analysed and interpreted. The general spirit of the paper is to go through the experience from physical documents to online documents using an ERP system that can protect the environment.

### 2. Literature Review

Enterprise Resource Planning systems are the new solution for any institution. These systems provide functionality in an integrated way using a single state-of-the-art IT architecture. ERP systems essentially change the fundamental work processes of a



business. They involve changing all design processes and the all development of an institution. All ERP implementations involve business process reengineering and change management. An improvement may or not involve a customized software solution (Watson and Schneider, 1999). ERP systems are used by large corporations around the world, recently replacing the management, financial and administration computer systems in the higher education sectors (Pollock and Conford 2005). ERP has played a significant role in the IT management of higher education. ERP systems in higher education can have multiple scopes, tracking a range of activities of including those of human resource systems, administrative student information systems and financial systems (Noaman and Ahmed, 2015). Despite the challenges of implementing ERP systems, organizations in the corporate sector, which likely operate in more financially competitive environments than those in the non-profit sector as most of higher education institutions, have experienced numerous benefits from ERP systems during the last two decades only on the management, financial and administrative level. Higher education has always been a sector that has unique organizational models and processes as well as objectives compared to other business, the higher education system supports the academic activities in colleges including some basic process such as scheduling, learning process, advising and follow up and performance indicators, and examination process. Previous studies have identified many similarities between implementing ERP system software in educational institutes and in other organizations (Pollock and Cornford, 2005). Higher education was strongly influenced by global trends in recent years. Many governments have notified universities around the world to improve their performance and as well overall efficiency (Allen and Kern, 2001). Raising stakeholder expectations (especially for governments, but also for students and employers), related to quality and performance requirements, and competitive educational backgrounds have directly influenced universities. The decreasing government support, put pressure on universities around the world to adopt new strategies to improve their performance (Fisher, 2006). As a result, the higher education sector turned to ERP system, with the hope of helping them copes with the changing environment (McCredie and Updegrave, 1999). Then, existence management and administration computer systems were replaced by ERP in certain institutions (Pollock and James, 2004). Their replacement was aimed at achieving more efficiency and accessibility for all members and improving end-user performance by providing better managerial tools (Kvavik et al., 2002).

The ERP system is often the largest software application adopted by universities with significant amounts allocated to them for implementation. Research related to ERP systems in university environments is less compared to other environments (Nielsen, 2002). Universities differ from other organizations because they have different circumstances, environments and they use ERP technologies for academic purposes (Mehlinger, 2006). The university and employees on a regular basis interact with core institutional activities and with the help of ERPs, students can access more information and have access to better e-learning environments.

The system is, by definition, critical to the mission of the institutions (Abugabah and Sanzogni, 2010).

### **3. Methodology**

The current research was qualitative and aimed at an interview and also the analysis of the answers received from the respondents. The interview contained 3 questions that was related to the current topic of ERP systems and higher education and was conducted in October 2021. The respondents who participated in this interview were:

Micu Alexandra - auditor, Radu Alina - certified independent accountant, Apostoiu Florin - student, Stama Adina - administrative staff, and Ghita Anca- economic director. They were strategically chosen both in the public and private environment because I wanted to highlight the view from inside but also from outside about the public domain, respectively of higher education.

The first question of the interview was: What do you think about ERP systems? Are they more advantageous for any organization than the classic management, financial or administrative systems? Micu Alexandra: "Yes, they are, but also these systems are more expensive than classic systems". Alina Radu: "Yes, they are much more useful than classic systems because integrate all activities in a single database and they have also electronic archive". Apostoiu Florin: "Yes, ERP systems are the new generation!". Stama Adina: "Honestly I personally prefer classic systems; they are much easier to use. But of course, ERP systems are a real evolution in today's market. Usually when you are already used to a certain type of system it is quite difficult to get used to a new one. Ghita Anca: Definitely, at the moment these ERP systems are very popular and have a significant share of the Romanian market (especially Oracle, SAP). However, I believe that you need to accurately evaluate your activity and decide what you really need. ERP systems are also expensive, and not only the system itself but also its implementation and maintenance. Besides, it matters a lot what type of organization you own, and depending about your activity, it is recommended to make an exact analysis and to put in balance any type of system that best suits your organization/ business".

The second question of the case study was: What do you think about the bureaucracy in the public domain, especially in higher education? For any situation you often need at least a written request, or even a file with documents, what do you think about this situation?

Micu Alexandra: "Yes. Almost every time you interact with the public sector, you have to prepare with a lot of physical documents. It's very annoying". Alina Radu: "I know that in our country the bureaucratic level is high. However, there are certain sectors and you can solve problems online. For example, tax returns are filed online. However, education sector is still full of these "papers" messes". Apostoiu Florin: "Somehow I am used to these aspects. The university has been working on the same concepts for years, and I personally adapted to this bureaucracy". Stama Adina: "I honestly prefer not to talk about these issues".

Ghita Anca: "I can say that it has decreased a bit compared to 10 years ago given the current situation. The authorities are trying to resolve online situations as much as possible, especially since the Covid 19 pandemic broke out, many institutions have adapted to online communication." The last addressed question was:

Is the ERP system a solution to improve the higher education system, especially for administrative topics, many of which are currently physically resolved?

Micu Alexandra: "Definitely yes. But for that, the institutions have to allocate certain amounts". Alina Radu: "Yes". Apostoiu Florin: "I believe so!". Stama Adina: "They may be a solution, but I don't know how desirable they are at the moment". Ghita Anca: "Of course, it is a solution, but certainly a much more expensive one"

#### **4. Conclusion**

To conclude, this research validated my objectives, and ERP systems represent a real solution for higher education system. Due to the fact that these systems use an online interface, they can improve the quality of information in higher education sector by the fact that it would eliminate the archives of physical documents harmful to the environment and which also occupy useless space (that could be utilised elsewhere).

According to the answers received, I can say that the subject has a significant impact on respondents. The majority of them really appreciate ERP systems and some consider it a solution for higher education. But somehow, they talk about the subject from a sceptical point of view. Because this kind of system involves certain amounts of investment. Of course, other new research on this topic can be done in detail.

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# OPPORTUNITIES BUILT FROM CHALLENGES: THE COVID-19 CRISIS AND ECONOMIC AND ENTREPRENEURSHIP EDUCATION

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**Abstract.** *Economic and entrepreneurship education is perceived as a strategic tool to improve economic development; therefore, the subject has been highly researched in the last three decades and it has become a priority both in practice and in the academic field. The trigger of the most recent global crisis, COVID-19 has emphasized the need for creativity, initiative, strategic thinking, adaptability, risk taking and economic education of the population in order not only develop but to survive. All these traits are part of the entrepreneurial portrait. The new challenges have brought new opportunities for economic and entrepreneurship education that need to be explored and developed for the present economic reality.*

**Keywords:** entrepreneurial education; crisis management; uncertainty.

**JEL Classification:** I25; L26.

## 1. Introduction

Crises are complex and they have effects that are felt instantly but also after a long period of time (Ansell & Arjen , 2019). The global pandemics crisis triggered by the coronavirus has been labelled as a “black swan” event, as described by Taleb (2007): a rare event that is difficult to predict using typical models that will have severe ramifications on people and organizations. Crises are not a newness to the educational sector but none of the crises that took place before have had such an enormous impact on the education practices, therefore this brought to the surface some questions regarding the role of the education in society and how the education sector can respond to crisis (Ratten & Jones, 2021). The covid-19 crisis determined business ventures and business people that gathered to find solutions and entrepreneurship education is now needed more than ever due to its approach regarding creativity and positive thinking (Kraus, et al., 2020); entrepreneurship is needed in the society due to its role in creating societal development and keeping peace and its approach has to change now in the light of the new developments after this global crisis to a direction that takes into account the latest developments in the social and economic environment, the crisis management aspect and digital transformation in entrepreneurial education (Ratten & Jones, 2021). Challenges for the educational system include the changes in the environmental, technological and methodological aspect of the entrepreneurship education.

## 2. Entrepreneurship education and the COVID-19 crisis

Entrepreneurship education is generally viewed as an important tool for increasing and influencing competitiveness throughout industries (Ratten & Jones , 2021) and studies that have implied seemingly experimental methods have acknowledged that EE will reveal shy effects or no effects on short-term results such as entrepreneurial

intentions (Oosterbeek, et al., 2010) but might enhance non-cognitive competences that are significant for entrepreneurship (Rosendahl Huber, et al., 2014). Even if empiric studies and analyses have found weak or no link between EE and the motivation of starting a business, it has been demonstrated that the link between entrepreneurial performance and EE is quite important and that there is a positive relation between the two in terms of income, firm survival or growth and profits (van der Sluis, et al., 2008; Unger, et al., 2011; Van Praag, et al., 2013). Therefore, in crating an entrepreneurial mindset. Moreover, entrepreneurship education is an important tool to be used in order to enhance regional development and it is important that the concerned actors cooperate toward reaching the same goal that benefits and strengthen the entrepreneurial intention of the society (Anderson, et al., 2017).

Traditionally, EE is viewed as a part of the education that teaches the skills to start and to grow a business (Mentoor & Friedrich, 2007) but latest approaches tend to include EE in various areas to students that do not intend to start a business or need to acquire several practical skills but also to gather knowledge and develop a mindset that will help communities and promote improved quality of life (Ratten, 2017). These trends started even before the crisis generated by the coronavirus when the economic change was only emphasized.

#### Opportunities for an interdisciplinary approach

Entrepreneurship education (EE) can be perceived not only as the teaching of skills needed to start and survive in the business world but as an effective way of obtaining insight on how to help the community and how to promote the idea and practice of improved quality of life (Ratten, 2017). In the light of these findings, the suitable definition of entrepreneurship education could be that of “a process through which learners acquire a broad set of competencies can bring greater individual, social and economic benefits since the competences acquired lend themselves to application in every aspect of people's lives” (European Commission, 2011, p. 2). Entrepreneurship education does not end with the graduation of a program but it rather starts with the knowledge acquisition that will be transposed into practice to develop a life and business skill and is about developing the ability to perform in an entrepreneurial manner – attitudes and behaviours are perhaps more important than knowing how to manage an enterprise (Badulescu, et al., 2020).

The economic perspective of education regards several aspects concerning the environment, sustainability, society and lately, digitalization. As far as the digital potential of economic education in concerned, the new challenges and dynamic climate of today's world, have made the digital transformation of business, science and education inevitable. Due to the COVID-19 crisis, the imposed restrictions have enhanced the importance of the digital aspect with the increase of courses taught through digital communication methods, with a formidable response in rapid grasping of the digital entrepreneurial education learning and teaching methods (Bacq, et al., 2020). Education is perceived as a leading factor of socio-economic development and therefore, the need for digital implementation is addressed in the first place to education (Sharipov, et al., 2021). With new challenges that came with the new crisis, it is necessary to explore new approaches under conditions of uncertainty and resource constraints.

As the 2019 OECD Report shows, “in 2017, 16% of all workers were self-employed across the OECD on average, and a further 13% of all dependent employees had a temporary employment contract”, “Self-employment is the most prevalent form of non-standard work in Greece and Turkey. Temporary employment also represents more than 25% of dependent employment in Chile, Poland and Spain. Non-standard work

can be a “stepping stone” to more stable employment, but many non-standard workers are worse off in many aspects of job quality, such as earnings, job security, social protection or access to training.” (OECD, 2019, p. 88). As a solution to these issues, policy makers, academics and media stress out the role and importance of financial and entrepreneurship education into all levels of education. Ransome (2014) argues that “The working world has changed. A university education used to guarantee a long-term job in a large company. Not anymore. Today, large companies are disappearing. Employment opportunities are short-term. Most people in tomorrow’s working world will find employment filling niche gaps, providing goods and services. People who are unprepared for that reality will be unable to provide for themselves. They will need to think like entrepreneurs” (Ransome, 2014). The policy makers, theoreticians and others that support the idea regarding the implementation of financial and entrepreneurial education for everyone argue that this training would benefit in particular the individuals living in low-income communities due to the fact that this would secure and empower both the individuals and the communities financially (Arthur, et al., 2018).

An entrepreneurial approach with emphasis on the control over a situation that carries a high degree of uncertainty is important in the COVID-19 crisis context (Ross & Augusto , 2020). Teaching entrepreneurship and an entrepreneurial way of thinking, which involves creativity and strategic thinking becomes even more important in times of crisis when special skills and attitudes are required in order to survive for example to such a dynamic and disrupting business environment as it has been during the coronavirus pandemics. The ability to adapt and to enable quick decisions and find solutions to a totally new environment is a skill that determines not only the development, but in times of crisis, even the survival of the enterprise.

### **3. Conclusion and research limitations**

This conceptual paper is tackling the changing nature of education, entrepreneurial education in particular and contributes to the existing research on the topic of the current pandemics, applying it to EE. Crises affect businesses and society and the COVID-19 crisis is still ongoing. The entrepreneurial spirit is needed in times of uncertainty and entrepreneurial education displays positive outcomes in crisis. This paper has focused on highlighting the role of EE in the context of the ongoing crisis, where people lost jobs, companies went to bankruptcy and a new mindset and new skills are required, colleges, governments, regional authorities and private actors have displayed various efforts in order to adapt to the new situation. As a result, there is a urgent need for inspiring individuals with the entrepreneurial spirit through entrepreneurship subjects designed to help enhance the positive benefits of acknowledging solutions for the crisis and managing them with creativity, adaptability and knowledge. Due to the ongoing nature of the crisis, this research is conceptual only, but it can be the basis for studying the initial reaction, the response to the situation given by the educators and the involved parties such as states and companies to asses to what extent did EE change during and after the crisis.

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## CHALLENGES OF START-UP COMPANIES

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**Abstract:** *In our globalizing and fastly developing world economy, the emergence of start-up companies is now almost commonplace. With the development of new developments and innovations, geographical distances can be reduced, which can help start-ups with newly established potential to expand into foreign markets. However, for start-up companies, we cannot always report success. In our accelerated world, dynamically changing customer demands, changing circumstances day by day, pose significant challenges for start-up companies. A significant number of start-up companies are unable to handle this pressure and are struggling to survive. In my study, I give a comprehensive picture of the development history of start-up companies and cover the main milestones of their life cycles. In my research, I place great emphasis on examining the challenges of start-up companies. The focus of the study is to examine the failures of start-up companies. The study aims to contribute to the understanding of the operation, strategic management and behavior of start-up companies.*

**Keywords:** failure, survival, strategy, challenges, start-up

**JEL classification:** M13

### 1. Introduction

The literature deals in detail the developments and development of history of start-up organizations both domestically and internationally. The economy of our globalized world is characterized by the increasing challenges of competition. With new developments and innovations, geographic distances can be eliminated, thus contributing to newly established start-up companies expanding to the foreign market. The expansion of an undertaking beyond the borders of the country and local spreading appears in several forms. We can talk about cross-border cooperation, strategic alliances, joint ventures, various corporate and trade cooperation, international developments, start-ups, and merger. However, in many cases it can be a start-up company that does not achieve global success in their own and even the overwhelming majority disappear. In this study, I present the history of the development of start-up businesses and highlighting the main milestones of their life cycles. During the research, I put great emphasis on examining the challenges of start-up companies. The focus of the study is to explore the falls of start-up companies.

### 2. Theoretical Background

Definition of Start-up company:

In the case of domestic and international literature, there is no clear definition of start-ups. Therefore, I would like to define with my own words: "The start-up company is a newly established company that has some kind of product / service innovation, it is available for high potential, and from establishing it is aimed at expanding the foreign

market, a temporary organizational form that covers multiple phases and a repeatable business model." The definition of the concept of the start-up company, as I have previously mentioned is very diverse, but to me the description of Steve Blank (2012) is closest to me. According to Blank the start-up is as follows: "The start-up is an organization formed to search for a repeatable and scalable business model." That is, the start-up is nothing but a temporary organizational form that covers a scalable, repeatable business model. These companies are in all cases through venture capital, and multi-scale investment models are used. Consists of five phases. Typically covers an investment level of \$100-150 thousand. (Blank 2012)

History of development of Start-ups:

The world's international start-up center is in the US Silicon Valley. In the 1960s, innovation has been taking place in the 1960s, which has won the unique start-up character in the 1990s. In the pre-start-up phase, the Silicon Valley innovation background was better built on military industry technological orders. First wave: The "DotCom Lufin" could be linked to the first start-up wave and mainly market-based business-based market-based market based. Second wave from 2005 was the first typical incubator companies in the Silicon Valley (eg. Y-Combinator and TechStars) that launched the main methodological knowledge. In the silicon valley, the ecosystem determining the work of the start-up world, which is the main driving force behind a global success of global successes, such as typical start-up world clients, for example, Google, Facebook, Groupon, Twitter. These companies were in all cases through venture capital. (Smith 2015) The venture capital industry started to invest in innovative micro-enterprises from the beginning of the 2000s and a multi-scale investment model was created. The starting level from the idea phase to the company is called "Pre-Seed" and "Seed" phase. This typically means an investment level of \$ 100-150 thousand. This is followed by "Level A", "Level B", where you can get millions of dollars for a potential start-up company. (Galbraith 1982)

Developing start-up businesses according to life-cycle theory:

**Table 1:** Development models of start-up companies

Reference	Bhave (1994)	Kazanjian (1988)	Galbraith (1982)
<b>Model</b>	Three levels	Four levels	Five levels
<b>Development stages</b>	1. Opportunity stage 2. Technology setting and organization 3. Switching phase	1. Concept and development 2. Distribution 3. Growth 4. Stability	1. Proof of Principle / Prototype Phase 2. Model phase 3. Commissioning 4. Natural growth 5. Strategic maneuvering

Source: Tsai (2011) Development of a Start-up Business, p. 4.

During my research, the "organizational life cycle theory" is used to the question of the development of start-ups. This type of theory assumes that the start-up development process follows predictable patterns. These patterns can be further developed for several consecutive phases. (Smith 1985). Despite the differences between different lifecycle models, the growth and development of businesses is a progressive and linear process and all businesses must face certain key stages in all main phases. (Kaulio, 2003; Kazanjian, 1988; Kazanjian and Drazin, 1990). In the

following table, The table 1. compares the development models of start-up companies according to life cycle theory.

Challenges of start-up companies:

Preliminary research on the challenges of start-ups addresses several common challenges among different start-ups (Shepherd 2000). However, most of the challenges are unique and the extent of the impact on start-ups varies. Start-up challenges include the followings:

There is no marketing and no market demand for your product or service.

Lack of competence to lead a company - in the leader and the team.

Ignoring financial problems.

Reject feedback on the prototype and end product or service.

Weak team, bad leadership.

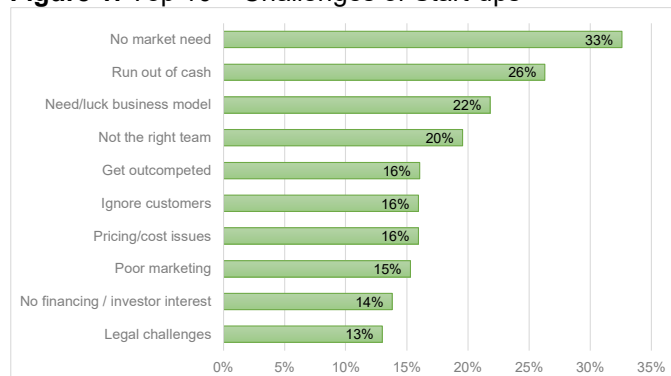
### 3. Materials and methods

In my research, international literature was processed closely related and reviewed to the topic. The study relied on secondary research based on CB Insights, Fract.TL, Statista and Failory data web-sides.

### 4. Results

After collecting the data, as a first step, I examined the possibility of failure types. On Figure 1. we can see the root causes of the failure, which leads to the top 10 challenges of start-ups.

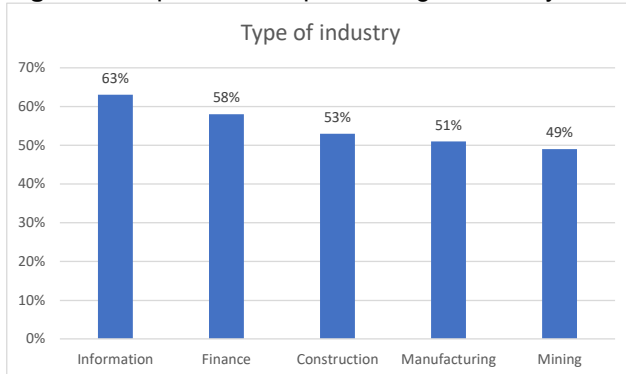
**Figure 1:** Top 10 – Challenges of Start-ups



Source: Own construction based on my secondary research

We can see on Figure 1. that for start-ups, examining the market is one of the most important factors in several ways.

**Figure 2: Top 5 – Start-up Challenges Rate by Industry**



Source: Own construction based on my secondary research

On Figure 2, I was focusing on start-up challenges rate by industry. We can see the highest challenges rate is in the Information industry. It includes a large portion of the true high-risk for start-ups.

## 5. Recommendations and Discussion

A review of the literature has shown that the challenges and failures of start-up companies have been addressed by many for a long time and have played a significant role in business for many decades. It can be seen from the results that start-up companies face a wide range of challenges. The corporate strategy of start-up companies is mostly incomplete in terms of market needs in terms of market knowledge. Further research is needed to understand the path to the failures of start-up companies and exactly what causes them. In my opinion, it is necessary to extend the examination of the cases to further years. In addition, I think it is essential to conduct in-depth interviews with the leaders of start-up companies to get a more complex picture of the company's strategy thinking.

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## CURRENT SITUATION IN HUNGARIAN HOME HEALTH CARE AND ITS FUTURE DEVELOPMENT POTENTIAL COMPARED WITH THE NORWEGIAN SYSTEM

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**Abstract:** *The main aim of home care is to provide care for the people, who suffer from the different diseases and to support them in their recovery and self-care. Since usually hospital care proves to be too short and patients need additional care at home, home care services can be of great help to both the patient and relatives/family members. The home care is more convenient, cheaper, just as effective as care in different care facilities and it includes several types of services. In Norway, the care of the elderly population is primarily a municipal responsibility. The municipal health service should provide the most efficient, basic level of the health care for the elderly population and this could be reached via home care, with the aim to keep patients in home care for as long as possible and to transfer them to different care institutions only in the case of the final need. This service type of health care approach is referred to as the Nordic model. In Hungary, since 1996 the home health care is financed from the resources managed by the National Health Insurance Fund. Only 9% of people aged 65 and over use this home help service. For those with more severe conditions, where self-care is also a problem, home care is provided either by family members or by a carer employed within the private service. In Hungary, there is a great potential to develop the local care network. It would be important to define the extent of coverage, to choose the area in which the service would be operating, taking into account both the real needs and the ability to pay and to insure adequate coverage with nursing staff.*

**Key words:** Home care services; Home health care; Nordic model; Home assistance; Elderly population; Home care nurses

**JEL classification:** I110; I180.

### **Background**

Home care refers to the care of the patients in their own homes, including nursing, home health care and providing help in everyday activities. Professional home care is primarily issued based on physician's orders or recommendations. Its main aim is to provide care for the people, who suffer from the different diseases and to support them in their recovery and self-care.

People of any age and with different conditions and diseases can use home care, including patients with complex health needs requiring special medical equipment and regular monitoring, patients who have undergone surgery or suffered an injury and require assistance with self-care and housekeeping, terminally ill patients, elderly patients with disabilities, chronic illnesses or cognitive impairment and new mothers with infants as well. Home care includes several types of services. It could cover medication management and education, physiotherapy, rehabilitation, nutritional counselling and therapy (e.g. feeding tube feeding), tracheostomy and gastrostomy care, wound care (e.g. care of bedsores or surgical wounds), pain management, infusion therapy, speech therapy, behavioural and mental health counselling,

paediatric care, home safety education and counselling, palliative care, help with the patient's daily life (e.g. preparing meals, assistance with eating, hygiene, bathing, dressing, cleaning). Since usually hospital care proves to be too short, home care services can be of great help to both the patient and relatives/family members. The home care is more convenient, cheaper, allows patients to spend more time with their families and just as effective as care in different care facilities. One of its key aims is to provide sufficient care in order to avoid unnecessary hospitalisation.

William Rathbone (1819-1902), an English businessman and philanthropist, first organized district nursing for patients, who could not afford the expensive health care. Today he is known as the initiator and creator of the home care (Hardy, 1981). Following the British model of district nursing, in the late 1800s several associations called District Nurses were established in the northeastern part of the United States, based on Florence Nightingale's "visiting nurse" model. During and after the First World War, patient care evolved towards hospital care until the 1960s and 1980s, when the importance of home care increased again. In 1966, a national health insurance programme, Medicare, was established in the United States, providing health care primarily for American citizens over the age of 65, but also for younger patients with various disabilities, end-stage renal disease and amyotrophic lateral sclerosis (Rice, 1998).

In Hungary, in the terms of social care, the church had a leading role in providing care (including health care) for the poor people. The first charitable foundations were established in the 17th century, while in the 19th century their importance became prominent. In the 19th century, as a result of the accumulation of the different social problems, the state became a third actor in action to relieve poverty, alongside the church and private foundations. This was followed by the first Hungarian Poor Law in 1871. In Hungary until the second half of the 20th century, there was a public medical service, with district physicians, followed by the establishment of the division medical system. In 1992, it was replaced by the general practitioner (GP) service. The organization of the home care started in the 1990s. In 1996, the National Assembly decided, that patients should receive free home health care, financed from the resources managed by the National Health Insurance Fund (Sövényi, 1997).

### **Home Health Care in Norway**

Norway has an universal, state-run, national tax-funded health and social care system, which aims to meet the basic health and social needs of the population (including long-term care) free of charge or for a low user fee. These services are provided at local government level through GP cooperatives, home care and institutional care (Christensen, 2018). Every Norwegian citizen can choose a family doctor and GPs cooperate with home care services organized at the municipal level (Ringard, 2013).

Inpatient care is provided mainly in hospitals established by the state and owned by the regional health authorities. Since the late 1980s, Norway has pursued a health policy of replacing relatively expensive inpatient care with less expensive outpatient care and of increasingly promoting home health care. This policy was reinforced by the coordination reform implemented in 2012 (The Coordination Reform, 2009). In Norway, the care of the elderly population is primarily a municipal responsibility. The municipal health service should provide the most efficient, basic level of the health care for the elderly population and this could be reached via home care, with the aim to keep patients in home care for as long as possible and to transfer them to different care institutions only in the case of the final need. This service type of health care

approach is referred to as the Nordic model (Kemp, 2012). Home care became part of the municipal health service in Norway in 1972 and has been a basic principle of Norwegian health policy (Sørbye, 2009). As per Norwegian Health and Care Services Act, Norwegian citizens have the right to receive home care regardless of age, gender, socio-economic status or other criteria (Health and Care Services Act, 2011).

Local authorities determine the type of home care service and the level of care, which is issued as a contract between the municipality and the patient receiving care. The home care in Norway is provided by qualified, licensed nurses and includes rehabilitation, therapy, care activities and assistance with daily tasks (Fjørtoft, 2012). Home care is organised in two different ways. Medium-sized and small municipalities use a combination of the two models. One model combines the provision of the service and its supervision, while the other model separates the "claimant" (local authorities) and the service provider. The nurses in the service unit assess the applicants for care, while the 'requesting for service' unit (local authorities) authorizes the requests.

From a demographic point of view, it is also important to note the population of Norway is approximately 5 millions and there are in total 428 municipalities in the country. Of these, the smallest has 200 inhabitants, the capital (Oslo) and the largest city has 658 390 inhabitants, while around 55% of the municipalities have fewer than 5 000 inhabitants. Municipalities with higher income have a higher use of support services for selfcare and daily activities, while small municipalities have a high demand for home health care services. Oslo and the three other largest Norwegian cities, Bergen, Trondheim and Stavanger, have the lowest demand for home health care services among the population aged 80 and over, as these municipalities have the highest capacity for long-term institutional care. The need for support/assistance with activities of daily living was found to be highest in municipalities with a medium population (5-19 999 inhabitants) (Otnes, 2015). Based on the available data, it can be said that the waiting time is less than 15 days in 80% of cases.

Research on palliative care conducted in 2015-2016 with Norwegian GPs and home care workers highlighted several interesting conclusions (Danielsen, 2018). GPs and home care nurses should establish a close working relationship with the patients and their family early on and provide emotional support to the family. A second important conclusion is, that the continuity of palliative care between the discharge from the hospital and transition to the primary care could be a problem. A number of studies have emphasised the importance of an appropriate flow of information between hospital and palliative care at primary care level (Luker, 2000).

## **Home Health Care in Hungary**

### **Demographic Characteristics and Health Status of the Population in Hungary**

In 2020, Hungarian population was 9 769 536 (4 680 790 men and 5 088 736 women). Of these, 1 750 216 lived in Budapest as capital, 5 130 058 in other rural towns and 2 889 252 in municipalities.

The highest population density was observed in Budapest (3 333 persons/km<sup>2</sup>), followed by Pest county (203 persons/km<sup>2</sup>), Komárom-Esztergom county (133 persons/km<sup>2</sup>) and Győr-Moson-Sopron county (112 persons/km<sup>2</sup>). The lowest population densities are in Somogy (49 persons/km<sup>2</sup>) and Tolna (58 persons/km<sup>2</sup>). In terms of the number of towns, the counties with the highest number of towns are Pest (54), Borsod-Abaúj-Zemplén (29), Szabolcs-Szatmár-Bereg (28), Jász-Nagykun-Szolnok (22), Bács-Kiskun (22), Békés (22), Hajdú-Bihar (21) and Fejér (17). Based on 2019 data, the highest GDP per capita is in Budapest (10 048 thousand

HUF/person), followed by Győr-Moson-Sopron (5 525 thousand HUF/person) and Komárom-Esztergom (4 879 thousand HUF/person).

According to the Hungarian Central Statistical Office (Központi Statisztikai Hivatal, 2020), in 2020 the average age was 42.8 years, while the average life expectancy at birth was 76.16 years (72.86 years for men and 79.33 years for women). According to the 2016 data of the Hungarian Central Statistical Office (Központi Statisztikai Hivatal, 2018), the percentage of the elderly population (65 years and over) in the total resident population is highest in Békés (20.9%), Zala (20.7%), Somogy (20.2%) and Heves (20.1%), while the lowest are in Szabolcs-Szatmár-Bereg (15.3%) and Pest (16.6%) counties. More than 20% of the population aged 75 and over is severely limited in terms of mobility, according to the 2019 survey. According to the 2014 data, the most affected region in terms of physical or sensory limitations in Hungary is South Transdanubian, with 17% of severely limited people, while the most affected regions are Central Hungary and West Transdanubian, with 10% and 11% of severely limited people respectively. 18.4% of the Hungarian population have some level of difficulty in carrying out everyday tasks, while 3% are unable to carry out everyday tasks independently. Unfortunately, for those with more severe conditions, where self-care is also a problem, it is provided either by family members or by a carer employed within the private service, since the home help service subsidised by the OEP does not provide care. According to the Hungarian Central Statistical Office, in 2019, a total of 61 421 patients in Hungary used home care and specialised therapy services (physiotherapy, physiotherapy, speech therapy) financed by the National Health Insurance Fund (OEP).

### **Potentials for Home Health Care Development in Hungary**

Based on the data so far, it is clear that in Hungary, the population aged 65 and over ranges from 15.3% to 20.9% of the total population. This is important to highlight because chronic diseases and musculoskeletal and sensory limitations increase with age. Despite these figures, only 9% of people aged 65 and over use home help services.

In Hungary, in addition to home care financed by the National Health Insurance Fund, home care/assistance services organised by various private companies are available for a fee. Most of these companies operate and provide services in Budapest and Pest County. Based on the mentioned above, it is clear that there is a significant need and demand to create additional home care and assistance services in the Hungarian market.

The first major issue/challenge in setting up new home care service is the selection of the right location. The ultimate goal would be to cover as much of the country as possible, but it is necessary to rationally determine the extent of coverage and to choose the area accordingly, taking into account both the real needs and the population's financial abilities to pay for the care. Two important aspects should be assessed, the demographic characteristics of the population and the economic and income characteristics of the area. The selection and availability of staff would be also an important consideration. Those areas and towns should be taken into account, where the regional branches of the Chamber of Health Professionals are located as this would be of a great administrative help. Comparing county-level data on gross income (GDP per capita), population density and the number of cities, we can conclude that, apart from Budapest and Pest county, Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Bács-Kiskun, Csongrád-Csanád, Hajdú-Bihar and Borsod-Abaúj-Zemplén counties have demographic and economic/income characteristics that could be favourable for the establishment and expansion of home care services. Also,



it would be definitely favorable to designate Budapest as the administrative centre of such an expanded home care/assistance service on the county level. Additional sites could be established in Székesfehérvár, Győr, Tatabánya, Kecskemét, Szeged, Debrecen and Miskolc.

## Conclusion

As a second step to further develop the home care service, it would be important to further develop the network of nurses in larger cities in addition to the county seat. As we are talking about a service that is delivered in the patient's own home, the focus should be on developing the local care networks. This would ensure adequate coverage with nurses. Also important element is the substitutability of nursing staff. With a sufficient number of nurses, it is possible to ensure smooth continuity of the care.

Following the Nordic model, close cooperation with the primary health care is essential for the good functioning of the home care service. GPs can help to establish a reference network. Taking into consideration several factors, we can conclude that, apart from Budapest and Pest county, Fejér, Győr-Moson-Sopron, Komárom-Esztergom, Bács-Kiskun, Csongrád-Csanád, Hajdú-Bihar and Borsod-Abaúj-Zemplén countries have demographic and economic/income characteristics, that could be favourable for the establishment and expansion of home care services.

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## WHERE IS THE MANPOWER?

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**Abstract:** *The successful implementation of projects requires the provision of adequate manpower. The project is led by the project manager, the composition and number of employees depend on the investment value and size of the project and the technical content of the project. The project organization also includes white-collar workers and blue-collar workers. The size of the project refers to the real size of the investment to be implemented, which affects the number of construction managers or installation managers as well as the number of manual workers. The technical content of the project concerns the number of staff in the project area in terms of professional areas. Additionally, the investment value fundamentally affects the project organization. An employee with the right qualifications and experience should be employed in the project organization, but unfortunately this is not always possible. One of the most difficult reasons for finding the right project staff is the variety of projects. Projects are usually unique, of course there are similar projects, but there are always some parts that make them even different. According to statistics and the results of my research, 20% of unsuccessful projects are due to non-compliance by the project manager or project organization.*

**Keywords:** project; organization; resources; experience; education; manpower.

**JEL classification:** O15, D2

### Introduction

Ensuring adequate resources is not easy due to labour shortages. Companies lure each other to top managers and the best in the shortage profession. Project implementation is a separate field of expertise that requires unique skills. Few can handle the tense pace of work required for project work. Anyone who is good in this field can easily find a job, even on serious investment projects. One of the most important factors in the implementation of the project is the project manager. The project manager must have the appropriate qualifications and experience to perform the given project management duties. The degree is determined according to the project. Experience expectations depend on the size of the project. Less experience may be enough to implement a simpler smaller project.

### Literature review

Project management requires a different leadership style than general company management. According to Turner (1999), the leadership styles of project managers are as follows.

**Table 1:** Project management leadership style

Project management leadership style	Competence examined		
	Decision making	Decision execution	Flexibility
Laissez-Fair	high	high	high

Democratic	high	low	high
Autocratic	low	low	high
Bureaucratic	low	low	low

Source: Turner, J. R. (1999). Handbook of Project-based Management: Improving the Process for Achieving Strategic Objectives

In contrast, the 6th edition of the Project Management Body of Knowledge Guide (PMBOK) (Project Management Institute, 2017b) already distinguishes six typical project management leadership styles:

Laissez-faire or hands-off leadership style: similar to Turner's (1999) statement, the emphasis is on the fact that the leader gives the project staff autonomy to decide on their own goals,

Transactional management style: basically goal-, feedback- and performance-oriented management,

Servant leadership style: the leader puts others ahead of him, is basically relationship and community focused, favours collaboration and puts his own leadership role in the background

Transformational management style: encouraging and motivating employees to think innovatively and independently, as well as to encourage them to be creative,

Charismatic leadership style: strong, confident, inspiring, energetic, inspiring leader,

Interactional leadership style: a combination of transactional, transformational, and charismatic.

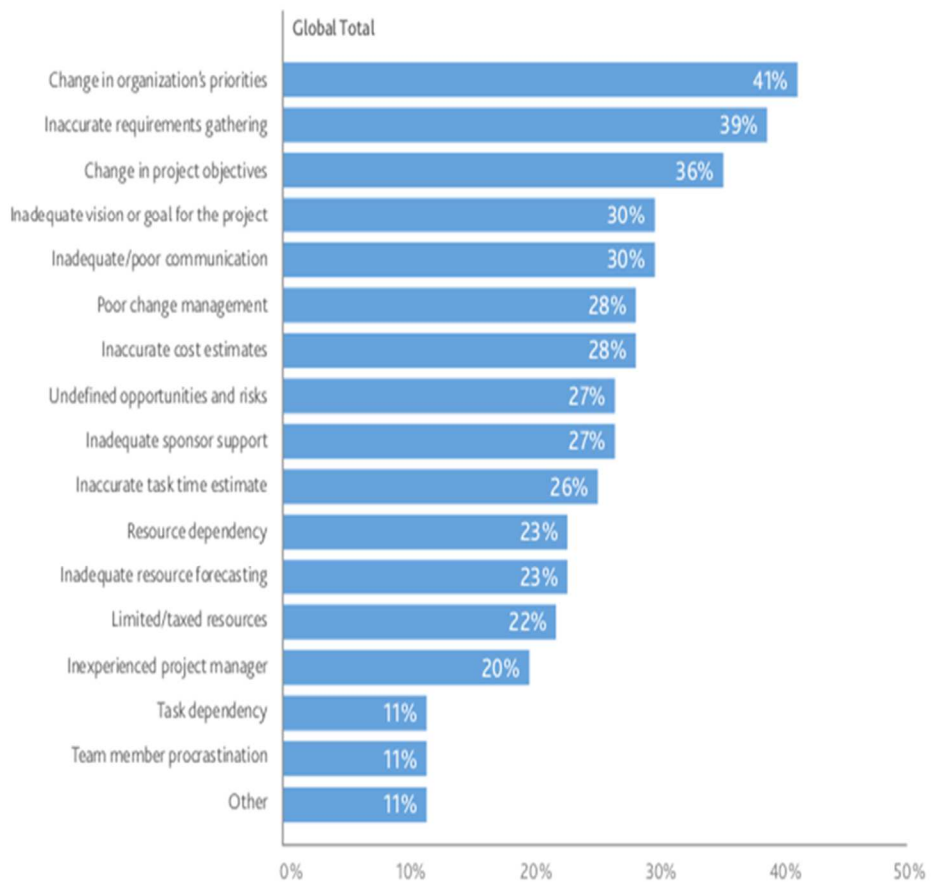
### **Practical background and experience**

In order to select the other members of the project, it is necessary to know the investment value and size of the project and the technical content of the project. The investment value and size are important because implementation requires supervision and if the investment value is higher, the number of participants in the project organization is higher at all levels. Several project engineers are needed to process the plans, procure the materials, logistics the materials, and conduct the on-site construction management. For example, the construction of a stadium requires a large on-site presence. The technical content, on the other hand, requires experts from different fields. For example, building a power plant requires professionals from all four disciplines, architecture, engineering, electrical, and control engineering. There is a shortage of specialists in the labour market, especially in the latter two fields. We also need to talk about blue-collar workers. Unfortunately, we are also in trouble in this area in Hungary. Our best manual workers prefer to go abroad to work in hopes of higher pay. Countries in the west of us can pay much higher, often 3-4 times more, for the same work they do at home. The situation is more severe in the construction industry. 70-80% of manual workers in the construction industry do not have a qualification belonging to the profession, most of them can only do unskilled work. The other field is where there are serious problems with mechanical engineering. 60% of welding and plumbing workers work abroad. And we are filling the missing resources from the countries in the east of us. MOL's investment in Tiszaújváros is the largest investment in Hungary today. Where does the workforce come from? Roughly 3,000 manual workers from abroad. Welders, plumbers, locksmiths, steel structure builders, etc. Workers come from the following countries: Turkey, Ukraine, Romania, Italy and perhaps most surprisingly, even from the Philippines. Is it worth working as a blue-collar worker from Philippines in Hungary? The answer is yes! Because he can't take a job in his home country. Is it worth hiring a Philippine manual

worker here in Hungary? It seems so! How? Thousands of kilometres, travelling, providing accommodation, transporting to work every day, providing work clothes and protective equipment. Adding up the cost, I don't think it's worth it, but that's my personal opinion. It is probably not worth it, but there is no choice, the investment must be completed, the work cannot stop. Europe is facing a growing labour shortage, so we are trying to make up for it from farther countries. However, in many cases, workers from abroad do not have the appropriate qualifications.

My research covers the areas of strategy management and project management. I examine the implementation of investment projects and research the reasons for the failure of the projects. One reason for failure is the inexperienced project manager. Inexperienced project managers are among the primary causes of project failure 20% of the time, according to the PMI's 2017 Pulse of the Profession report, see Figure 1.

**Q:** Of the projects started in your organization in the past 12 months that were deemed failures, what were the primary causes of those failures? (Select up to three.)



**Figure 1:** Project failures

Source: Project Management Institute's 2017 Pulse of the Profession report

Securing resources is one of the most important tasks in an investment. Inadequate resource planning and lack of professionals can also cause project failure. Resource planning also affects the project budget, so it is worthwhile to prepare a resource plan already in the project preparation phase. Under-planning of the number of employees means cost savings in the planning phase, but an increase in costs in the implementation phase. If the number of staff is not enough, we will not be able to meet the deadline, which will also mean that the project will fail. The failure of a project can be linked to criteria, as can the success of the project. The literature on project success factors is very extensive, but there is a broad consensus that the competencies of project managers have a major impact on project success. Greek (2013) put it this way, "the success or failure of projects depends to a large extent on the craftsmanship and commitment of the managers responsible for the projects and their employees".

In contrast, Khang and Moe (2008) classify success factors into three main groups, such as: competence-related, motivation-related, and project environment-related success factors.

According to Müller and Turner (2007), projects differ in both size and uniqueness as well as complexity. Accordingly, different sets of criteria must be used to assess success. Different projects require different types of management and management processes (Crawford et al. 2005), and the same is true for criteria that evaluate project success.

## **Conclusion**

The number of projects is rising, in all areas of the economy. However, as the number of projects increases, so does the number of unsuccessful projects. My research has shown that one of the main causes of failure is the inexperience of the project manager and the lack of trained professionals. Of course, many other factors influence the successful implementation of the project, but I will only deal with them in detail in the present study. The labour market is struggling, there are few professionals with project experience, so it is often necessary to see the project with newcomers or project inexperienced staff, which in turn leads to project failure. The only solution is to fill the project organization with professionals and the right number of staff. Of course, hiring the right professionals and having enough staff will increase costs, but if unskilled professionals manage the project, it can lead to much higher cost increases and a shortage of staff, which means that the project will fail.

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## ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS

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**Abstract:** *The topic of sustainability has experienced a new upswing. Society demands sustainable business from companies and wants transparent information in return. The importance of sustainable action is also reflected in investment decisions: the classic financial key figures are no longer the exclusive reason for an investment. Rather, non-financial indicators are expected to provide further information about the long-term value of a company. In 2014, EU member states adopted a directive to expand the reporting of large capital market-oriented companies, credit institutions, financial services institutions and insurance companies. Since 2017, this Nonfinancial Information (NFI) Directive has been mandatory for capital market-oriented companies in Austria within the framework of the Sustainability and Diversity Improvement Act (NaDiVeG). In concrete terms, this means that capital market-oriented companies must publish a non-financial statement or a separate non-financial report in addition to the management report. The number of companies generating and providing non-financial information to interested users is steadily increasing around the world, while the quality of disclosure of such information is increasing. Year by year, as evidenced by numerous studies and stakeholder surveys.*

**Keywords:** non-financial reporting; sustainable development; disclosure; regulations; performance indicators; stakeholders.

**JEL classification:** B55, F63, F64

### 1. Introduction

The process of development of non-financial reporting is observed in all the countries part of UE. The main tasks of the new regulations are to increase the information transparency of the results of the activities of companies on society and the environment cooperation to strengthen the reputation of organizations and increase confidence in their commercial activities; systematization of the process of introducing public non-financial reporting.

It is necessary to note the annual reports of companies, which reflect indicators characterizing the social and environmental aspects of activities.

Taking into account the presence of a large number of international and national corporate reporting standards that form requirements for the disclosure of various aspects of sustainable development, I highlight the most well-known and widely used: GRI (Global Reporting Initiative) standards and conceptual frameworks for integrated IR (Integrating Reporting) reporting.

In addition, taking into account the trends in the development of reporting of issuing companies, taking into account the increased attention to the factors of stable development, it is necessary to indicate the practice of developing American standards in the field of Sustainability Accounting Standards Board Standards (SASB Standards), which regulates disclosure requirements for companies whose shares are listed on the US stock exchange; special initiatives such as the Carbon Disclosure Project (CDP) and industry disclosure guidelines, such as in the energy sector.

The presence of common approaches, the standards under consideration have quite a lot of differences concerning both the target audience and the requirements for the content of the disclosed information, accounting for industry features and other important aspects that need to be taken into account when choosing a governing framework for the development of corporate reporting.

## 2. Findings

In order to reach the sustainable development goals, the organizations should develop a system of key performance indicators (KPIs) that correspond to each of the indicated aspects. The results of the development of the scorecard can be presented in the form of a table.

Quantitative and qualitative indicators are used in the development of a system of key performance indicators. Quantitative indicators of sustainable development, in turn, can be financial and non-financial. Quantitative non-financial indicators include, for example, such indicators as the number of jobs created, the number of employees who have undergone or will be retrained, will increase qualifications, get a new profession, reduce the number of jobs with heavy, harmful working conditions, occupational diseases and occupational injuries, the volume of emissions, discharges and waste. Examples of cost (financial) indicators are the capital and operating expenses of the organization related to environmental activities and the corresponding monetary benefits from them, for example, as a result of the growth of revenue from the sale of certified environmentally friendly products, the creation of new brands, the growth of energy efficiency, the reduction of payments for excess discharges, emissions of pollutants in environment, fines on claims for violation of environmental legislation, etc. The use of quantitative indicators makes it possible to compare them in the dynamics, as well as with similar indicators of other companies.

Qualitative indicators of sustainable development are used to assess the degree of achievability of a particular result, for example, in assessing the quality of life, the level of satisfaction of personnel, the compliance of products with the world scientific and technical level, etc., as well as for the analysis of non-financial strategies, including regulatory, operational, social, environmental, reputational etc. Qualitative indicators of sustainable development can also be quantified using conventional units (points, coefficients and ratings).

A possible structure of KPIs can be the one presented in the table below.

Significant aspects	Key Performance indicators
Cost-effectiveness	1: Created direct economic value: income of the organization.  2. Distribution of economic value: operating costs, wages and other charges to employees, payments to capital suppliers, payments to the budget and other parties involved
Supply chain Procurement	Percentage of purchases from local suppliers
Environmental Assessment of Suppliers	Percentage of new suppliers whose selection has been subject to environmental criteria
Human Resources Management	The level of staff turnover for the reporting period, including by age groups, gender, regions



Source: Developed by the author

Among the recommendations for the disclosure of information on key indicators in the field of sustainable development, it is worth highlighting the following: the availability of a standard format for presenting information, which would make it easier for users to navigate the report when analyzing indicators; transparency and clarity for the users of the symbols used and the content of indicators; stability of applied indicators and methods of their calculation from period to period to ensure comparability of data reporting company in dynamics, and so the same comparability of indicators companies of the same Industry.

### 3. Conclusion

In conclusion, although the information on sustainable development report is focused primarily on external users, the process of its preparation can be considered as an important tool for solving the strategic objectives of the organization itself: improvement of the risk management system; development of corporate management practices, including environmental and social activities. The ability to inform interested parties that a targeted sustainable development program allows it to solve strategic and tactical tasks and achieve results, for example, increasing the competitiveness of products, cost efficiency, etc., can become a tool for managing reputational risks.

The formation of public non-financial reporting, taking into account the best practices and the demands of international standards, is a relatively new challenge for many organizations, which creates inevitable problems for practice. To address them, it is necessary to accumulate, compile and share experiences in a format accessible to a wide range of stakeholders: in the form of specialized reviews and publications in professional journals; organization of meetings, open dialogues, webinars and other activities for the exchange of experience and its discussion.

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# COMPULSORY HEALTH INSURANCE: COMPARATIVE ANALYSIS OF TWO EUROPEAN COUNTRIES

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## **Abstract:**

*The compulsory health insurance institute is part of the healthcare financing scheme in several European countries. Despite this element, the form of regulation of this institute varies from country to country. The aim of the paper is to use a comparative analysis to point out the differences between compulsory health insurance in the market of the Slovak Republic and in the Czech Republic. The subject of the research is the regulation of compulsory health insurance. The countries of Slovakia and the Czech Republic serve as the object of the research. In these countries, despite their common history, the form of compulsory health insurance is different. The results point to several differences in the regulation of compulsory health insurance between countries. The conclusion of the article also makes recommendations for improving the financing of health care in Slovakia.*

**Keywords:** Health; Insurance; Healthcare; Finance; Slovakia; Czech Republic.

**JEL classification:** I11; I13; P51

## **1. Introduction**

Historically, the foundations of social protection in Europe began to take shape in the 14th century in the guilds of miners and craftsmen in the form of guild assistance. Later in the 19th century, with the development of industry and the economy, the pressure for a more comprehensive social and health security system began to grow (Flora and Heidenheimer, 2017). In 1881, Otto von Bismarck introduced the proposal for the first comprehensive compulsory public health insurance. Its progressive and prosocial reform has stood the test of time, and to this day the institute of compulsory health insurance has been maintained in several countries. However, in the 20th century there was a shift, the proportion of liberal elements in the health insurance market increased as a result of which various models of social security were formed. The Slovak Republic has undergone a significant change during its autonomous and territorial independence. In the 1990s, there was a transition to a market model of the economy, which also marked the area of social security (Štrangfeldová, 2013). From the original Beveridge model (financing of health care from tax), the institute of public health insurance began to be applied in the form of a compulsory contribution from the assessment base. Liberal elements have also been applied in the principle of the plurality of health insurance companies providing compulsory health insurance. Plurality was also associated with the private regulation of the health insurance company, thanks to which this principle was a great success. During the transformation period, the health insurance company was established by state enterprises, ministries, and other organizations. In the years 1994 - 1996, the number of health insurance companies was 12. However, due to the small insurance portfolio and regulatory entry conditions on the market, the number was reduced to 3 health insurance companies by 2004. We also find liberal elements in the possibility of

making a profit for health insurance companies, direct payments of freedom in concluding a contract with a health care producer by health insurance companies. The Czech Republic has also undergone an economic and political transformation. After 1989, public health insurance was created in the country. Public health insurance (Mertl, 2017) is also in this case a backup for the activities of health insurance companies. The content of public health insurance is the mandatory (statutory) participation of every citizen in public health insurance, which arises from the law and the citizen can take out this insurance in the health insurance company of their choice. From the obtained public funds, health care is paid according to the legislatively determined framework. However, the health insurance market is not marked by liberalization at the same level as in the case of Slovakia. We express the research assumption that, despite the similarities in the basic regulation, there are determinants influencing the performance of the health care system.

## **2. Materials and Methods**

The aim of the paper is to use a comparative analysis to point out the differences between compulsory health insurance in the market of the Slovak Republic and in the Czech Republic. These two countries are chosen because of their common historical development as well as the relatedness of health systems. As mentioned in the introduction of the article, both countries have undergone a transformation, which has also been reflected in the functioning of the health system. However, the institute of compulsory health insurance has its place in both systems. In the analysis, we draw primarily on data published in official government documents, statistical offices of countries, decrees and regulations. We analyze the collected data and compare the results. The main method of the paper is comparative analysis. The subject of the comparative analysis are financial and non-financial indicators due to the extension of the observation to the socio-demographic and economic description of countries. The analysis (Narkunienė and Ulbinaitė, 2018) serves to identify the similarities and differences between the regulation of compulsory health insurance. As the issue of compulsory health insurance, the broad analysis presented serves as a precursor in setting the goals of more extensive research.

## **3. Research Results**

We find similarities between countries in the legislative and institutional regulation (Table 1), in both cases the Ministry of Health is the guarantor of the provision of health care. However, in Czech Republic the General Health Insurance Company control activity in the redistribution of funds in compulsory health insurance according to the risk index, for this purpose was in Slovakia established a separate Office for Supervision and Health Care. There are also differences in the legal form of health insurance companies and their number. In Slovakia, health insurance companies are joint-stock companies that can generate profit; in the Czech Republic, health insurance companies are public corporations. Public corporations act on the basis of law and have defined powers and a specified purpose in the public interest (Zágorová, 2021). A joint stock company, on the other hand, acts as a market entity. However, their specificity is that health insurance companies must prioritize the payment of health care before making a profit. In both countries, General Health Insurance Company has the largest insurance pool. Commercial health insurance is almost non-existent in the countries studied. The reason is that the legislation defines the package of reimbursement from compulsory health insurance broadly and there is no room for the specification of additional health care paid for from commercial insurance.

**Table 1: Comparative Analysis of Regulation of Compulsory Health Insurance**

Data	Variables in year 2020	Slovak Republic	Czech Republic
Main Characteristic of Country	Number of Inhabitants	5 460 000	10 700 000
	Country area (in km <sup>2</sup> )	49 036	78 866
	Number of Economic Active Population	2 738 686	5 392 800
	Unemployment Rate (in %)	7,57	3,6
Economic Data	Average Gross Wage (in eur)	1 092,00	1 293,07
	GDP in Country (in eur)	89 823 958 780,59	209 102 619 149,85
	GDP in PPS (per capita)	71 %	94 %
	Health Expenditures (% of GDP)	6,96	7,83
Health Characteristic	Institutional Regulation	Ministry of Health	Ministry of Health
	Legislative Regulation	Act No. 580/2004 Coll.	Act No. 48/1997 Coll.
	Number of Health Insurance Companies	3	7
Compulsory Health Insurance	Insurance Rate of Employee	4 % from gross wage	4,5 % from gross wage
	Insurance Rate of Employer	10 % from gross wage of employee	9 % form gross wage of employee
	Insurance Rate of Voluntary Payer	14 % from assessment basis	13,5 % from assessment basis
	Insurance Rate of State Insured Person	4 % from average gross wage in economy 2 years ago	13,5 % from assessment basis order by decree in previous year
	Insurance Rate of Self-Employed Person	14 % from assessment basis	13,5 % from assessment basis
	Minimum Assessment Basis – Monthly in 2020 (in eur)	506,50	691,29
	Maximum Assessment Basis – Monthly in 2020 (in eur)	Not specified	Not specified

Source: own processing (2021)

The basic feature of compulsory health insurance is that it does not arise on the basis of a contract, but on the basis of law. Compulsory health insurance does not have the character of a commercial insurance, ie the health status of the insured or the lifestyle of the insured is not taken into account when concluding it. We can state that in compulsory health insurance there is an information asymmetry represented by reverse selection and moral hazard (Grignon, et al., 2018). The payer of compulsory health insurance in both monitored countries is 5 groups of persons. The difference is the reduced rate of compulsory health insurance, which is applied in Slovakia. The health insurance rate reduced by half is paid by the person with a disability, while the

assessment basis for the calculation of the contribution remains unchanged. In both countries, in the case of the calculation of health insurance for employees and employers, the assessment base is set as the gross wage and the gross wage of the employee. The average gross wage in a country in 2020 is shown in line 6. However, the basic difference in the survey of countries is the setting of the rate of compulsory health insurance for state policyholders. State insured persons are persons who have the status of a student, are unemployed, recipients of old-age pensions, women on maternity leave, socially dependent persons, etc. (more in the legislation of the countries). We can talk about a group of economically inactive people. In the case of Slovakia, the rate for these persons is set by legislation at 4 % of the assessment base, with the rate often changing during the year (in 2019 there was a change in January to 3.20 %; June to 3.44 %; November to 5.20 %). This change has a negative impact on the financing of health care, causes uncertainty for health facilities and additional administrative costs. On the contrary, in the Czech Republic the rate is fixed at 13.5%, while the amount of the assessment base changes. The assessment base is determined once a year (most often in July of the calendar year). Currently, the change in the assessment base is regulated by Government Decree No. 253/2021 Coll. The amended assessment basis in the Czech Republic comes into force on the 1<sup>st</sup> of January of the following calendar year. Thus, there is no room for manipulation of public finances in terms of additional co-financing. In the case of a self-employed person, the minimum monthly contribution in the Czech Republic is 93,35 euros for compulsory health insurance and in the case of Slovakia it is 76.44 euros.

#### **4. Conclusion**

In terms of evaluating the overall cost-effectiveness of health systems when looking at international statistics, we state that the Czech health system shows better results. The Slovak health care system is to the detriment of the significant indebtedness of public health care facilities. Various public policies are in place to eliminate this problem, but the results are debatable. Taking into account the public resources flowing into health care from compulsory health insurance, it would be appropriate for Slovakia to apply some elements of the Czech system, which would reduce the debt of health care. For this reason, we confirm the research assumption. The determinant in Slovakia is mainly the rate set inconsistently for economically inactive people in, who make up a significant part of the population. The set of a uniform rate for these people and its observance could bring additional resources to the health care system.

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# DISTANT EDUCATION IN ISRAELI SCHOOLS DURING THE COVID-19 CRISIS: SOCIAL AND ECONOMIC FACTORS AND CONSEQUENCES

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**Abstract:** *Since the period of Covid 19 crisis of 2020, distant learning and teaching becomes more actual in schools all over the world, and Israel is not an exception. The Corona pandemic influenced education systems all over the world, closing schools almost totally for some periods of time by government decisions, trying to prevent rapid growth of spreading the disease. In April 2020, 90% of all the pupils of the world were closed at their homes. Schools' lockdown impacts pupils, teachers and parents, from both economic and social points of view and has long-run consequences. Israel is not an exception. Its economy suffered from decrease in GDP, increase in unemployment, and education system suffered from adjustments it had suddenly make to distant teaching and learning. Of course, the most vulnerable are the minorities, like the Arab sector of education, which was damaged badly. The social and economic consequences of the pupils' dropout and reduce in quality of learning are serious and will be evaluated in the future.*

**Keywords:** Covid-19 crisis; distant teaching; Arab minority; economic and social consequences.

**JEL classification:** A20, A14.

## 1. Introduction

Since the period of Covid 19 crisis of 2020, distant learning and teaching becomes more actual in schools all over the world, and Israel is not an exception. The Corona pandemic influenced education systems all over the world, closing schools almost totally for some periods of time by government decisions, trying to prevent rapid growth of spreading the disease. In April 2020, 90% of all the pupils of the world were closed at their homes (Jamerson, 2020). Schools' lockdown impacts pupils, teachers and parents, from both economic and social points of view and has long-run consequences. In the world, schools' closure revealed economic and social issues of teachers' erosion, loans for students, infrastructures for distant education, lack of food security, and even loss of roof over head. In addition, children with disabilities and their families were hurt since they need education system more than others, lots of families face challenges of bringing children up at home all the time.

In Israel, lots of Covid 19 cases started to appear beginning from February of 2020, and very soon the schools were closed, in order to prevent the disease from quick spreading. Kindergartens and special education were still open, however lots of kindergartens actually did not function due to lack of workers. Later on, the state decision closed all the frameworks without exceptions till another announcement. There were some contradictions between the Ministry of Health and the Ultra-Orthodox authorities, some of whom did not agree to close the education system. After some threats of fines and even incarceration, the Orthodox authorities closed all the education institutions. Higher education continued their functioning distantly, taking some time to adjust to the changes. At this time, "national broadcasting system"



were established, with programs for all the school pupils from the first till the 12-th grades. The broadcasts are transmitted through internet and sometimes TV channels. In April the Ministry of Health announced that matriculation exams will be conducted in the emergency pattern. It was agreed upon only 5 matriculation exams of basic disciplines.

The universities decided to make their accepting rules more flexible and allow to accept students based on their matriculation grades only, without the Psychometric exams.

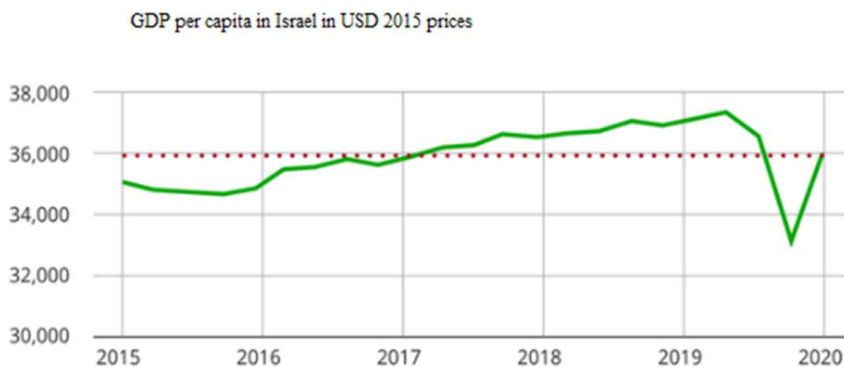
Later on, education system were closed and opened again for a number of times, and the situation was unstable, making it difficult for pupils, their parents and teaching staff deal with all the fluctuations.

## 2. Israeli economic background

In 2020, the Israeli GDP decreased for the first time since 1980, the unemployment increased dramatically, mostly due to closures and lockdowns. Generally, there were three lockdowns in Israel, during which many companies and governmental institutions had to work distantly. In last years, there is a stable increase of employment at the labour market of Israel. According to data published by OECD, average unemployment rate of OECD countries is 6.7% while in Israel it is no higher than 5.2% (OECD data. Employment rate).

For comparison: according to OECD data, unemployment rate of 2018 in Japan is 2.8%, USA- 4.1%, Australia- 5.5%, Canada- 5.9%, France – 9.8%, Italy-11.4%, and common index of 28 Europe countries is about 8%.

In 2020, the Israeli GDP decreased for the first time since 2015. The unemployment increased dramatically, mostly due to closures and lockdowns. Generally, there were three lockdowns in Israel, during which many companies and governmental institutions had to work distantly.



**Figure 1:** Israeli GDP per capita in USD 2015 prices.

Source: <https://www.themarket.com/markets/1.9311471>

During 2020, the unemployment increased dramatically, mostly due to closures and lockdowns. Generally, there were three lockdowns in Israel, during which many companies and governmental institutions had to work distantly: the first one 20.03.2020-19.04.2020; the second 30.09.2020-17.10.2020; and the third 27.12.2020-18.04.2021. The employment rates decreased during the lockdowns and

increased again in the breaks between them. Since the first lockdown was the most serious one, it is no wonder the employment during it was the lowest one.

At the time the supply chains of food and other goods are in great uncertainty, in the end of April of 2020 the rate of unemployment got to 708% (Ilan, 2020), citizens continued to lose their jobs during the three lockdowns and the rate of disease spreading did not decrease for a year.

### **3. Israeli Arab sector education system's situation during the pandemic**

During the year of 2019, Arab political leaders from the local authorities two times applied to the government (through the third sector organization dealing with citizen's rights) to realize rights of thousands of pupils of Arab local settlements to learn. The problems with infrastructure raised because of budgeting difficulties. Recognized local authorities could not provide teaching services to pupils from non-recognized settlements. In additions to the existing difficulties, the Corona crisis added even more to the fact that lots the pupils did not come back to studies.

Since the traditional education system in Israel was partially paralyzed due to the COVID-19 crisis since March of 2020, as a part of struggle against COVID-19, most of the Arab pupils dropped out of the education system both at the time the distance-learning arrangements were settled and later, when the regular studies at schools and summer studies were renewed (The Follow- Up Committee on Arab Education – Israel (2020).

In March-May of 2020 (the distant learning stage) the studies did not involve about a half of all the pupils in the Arab sector due to severe lack of computers and other communication devices, internet infrastructure problems in the local authorities and settlements, not enough training and preparations for local pedagogical staff, who were lost and not ready to act at the time of crisis, technological gaps between the Jewish and Arab education sectors in general, and other various problems stemming from socio-economic state and poverty.

In May-August of 2020 the regular studies were renewed but the presence of pupils in the Arab sector was poor- actually, about 85% of Bedouin pupils did not come back to studies, and in non-recognized settlements- even more. The education system failed to relate to trends and needs of the Arab society at the time of Corona crisis. In lots of local schools' buildings the physical conditions did not fulfil all the requirements of the Ministry of Health, which made parents to restrain from sending their children to school. Of course, the gaps which existed before between the majority and the Arab sector in Israel, might get deeper in this crisis.

Arab education system principals prepared a report about the severe lack of information technologies in schools and at homes for distant learning, infrastructure problems at school and settlements. The education system announced lately about a plan to supply computers to pupils and proper equipment to schools in the sector.

### **4. Conclusion**

Covid-19 may be called a serious crisis, which paralyzed many economics of the world. Israel is not an exception. Its economy suffered from decrease in GDP, increase in unemployment, and education system suffered from adjustments it had suddenly make to distant teaching and learning. Of course, the most vulnerable are the minorities, like the Arab sector of education, which was damaged badly. The social and economic consequences of the pupils' dropout and reduce in quality of learning are serious and will be evaluated in the future.

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## THE IMPACT OF TELEWORK ON ROMANIA

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**Abstract:** *Telework is currently a fundamental and effective measure to reduce the spread of coronavirus, known in the current economic context as COVID-19. Undoubtedly, teleworking brings both advantages and disadvantages to employees and employers depending on each context. The purpose of this paper is to examine the main advantages and disadvantages of this "technological revolution", but also how the authorities have intervened through fiscal measures. The motivation for approaching and developing this topic in this paper consists mainly in identifying the socio-economic impact that this measure has had on employees in Romania in the context of the current pandemic. The research method used is descriptive analysis, dynamic macroeconomic analysis using graphs, as well as comparative analysis according to the objectives pursued throughout the research. Compared to the way of presenting the information from the bibliography used, in this paper are found only the essential aspects, the particularities of the chosen research topic, which finally provides an overview.*

**Keywords:** telework; impact; transition; costs; measures.

**JEL Classification:** J81; O33.

### 1. Introduction

Telework, known in the specialized economic literature as telework, is the activity through which information and communication technology is used in order to carry out the activity remotely. This concept has grown significantly in recent years, especially in the context of the current pandemic. From an economic point of view, telework is an arrangement that gives the employee the opportunity to work in another alternative place, but approved by the company, such as at home or in a telework center. The present paper considers the study and analysis of the economic and social impact of telework on the employed population in Romania as a result of the outbreak of the Covid-19 pandemic, but also the measures implemented by the authorities.

### 2. The stage of knowledge

The term telecommunications was first encountered around the 1970s in the United States as a result of the effects of the oil crisis. Consistent with studies by Avery and Zabel (2001), the term was first introduced by Jack Nilles, who was a recognized engineer due to extensive projects for the National Aeronautics and Space Administration. Authors Troup and Rose (2012) conducted comparative research on formal and informal teleworking. This study was conducted in the public sector in Queensland (Australia), and the result was negative, as differences were identified between job satisfaction and the distribution of tasks between men and women with children.

### 3. Research methodology

This paper is based on a mixed research methodology, as it includes both the method of descriptive analysis, used to identify studies and introduction to the literature, and

a dynamic macroeconomic analysis used to conduct the case study on the impact identification pandemic on the economy, more precisely how the budget deficit and public debt have evolved in the context of Covid-19, which are highlighted in the form of time series, more precisely the graphs. At the same time, this paper includes an analysis of the measures taken by the Romanian authorities to support employees and employers in the context of the Covid-19 pandemic, but also a table summarizing the advantages and disadvantages of telework from the perspective of employers and employees in Romania.

#### 4. Case Study

##### 4.1. Ensuring the continuity of labor productivity in the context of the COVID-19 pandemic

Taking into account the current general framework that obviously affects the well-being of employees, but also the economic performance of companies, most companies globally focused on performing telework work during the COVID pandemic. -19. The main objectives of the governments when implementing such a measure were on the one hand to protect workers against the spread of this virus, and on the other hand to contribute to the efforts made by states to flatten the curve new cases. According to the latest studies carried out by the European Commission, it is still desired to maintain telework, especially in companies that agree with this measure and can operate in optimal conditions and in real time, because the importance of telework is necessary in maintaining jobs current work and maintaining productivity in the context of the COVID-19 crisis.

**Table 1: Advantages and disadvantages of employers / employees in the context of telework**

	<b>Advantages</b>	<b>Disadvantages</b>
<b>Advantages and disadvantages borne by employers</b>	<ul style="list-style-type: none"> <li>- Flexibility</li> <li>- More services</li> <li>- Productivity</li> </ul>	<ul style="list-style-type: none"> <li>- Equipment necessary for the continuation of the telework activity</li> <li>- Lack of involvement in the company</li> <li>- Loss of informal communication</li> </ul>
<b>Advantages and disadvantages borne by employees</b>	<ul style="list-style-type: none"> <li>- Flexibility</li> <li>- Lower costs and reduced travel time</li> <li>- Greater opportunities to get or keep a job</li> </ul>	<ul style="list-style-type: none"> <li>- Isolation</li> <li>- Mixing family responsibilities with professional ones</li> <li>- Deteriorating working conditions</li> </ul>

##### 4.2. The social impact of telework

There are currently numerous studies on the social impact of telework, which highlight both the positive and negative impact resulting from it. One of the most harmful effects of the COVID-19 pandemic triggered in 2020 is the increase in the number of people suffering from depression due to job loss, inability to adapt to work from home, isolation, stagnation of economic activity and social, as well as fear of infection. In short, measures taken to reduce the spread of the virus are seen as actions that isolate and deprive people of the necessary treatments. In short, measures taken to reduce the spread of the virus are seen as actions that isolate and deprive people of the necessary treatments. At the same time, according to a study carried out by

Eurofound, teleworking brings with it many opportunities from the perspective of gender equality, including better participation in the labor market, greater flexibility in managing working time while combining responsibilities associated with personal life, increasing productivity by improving performance, a much more accurate correlation in terms of spatial demand and labor supply, thus not requiring physical travel, low costs in terms of eliminating travel and finally row, time saving.

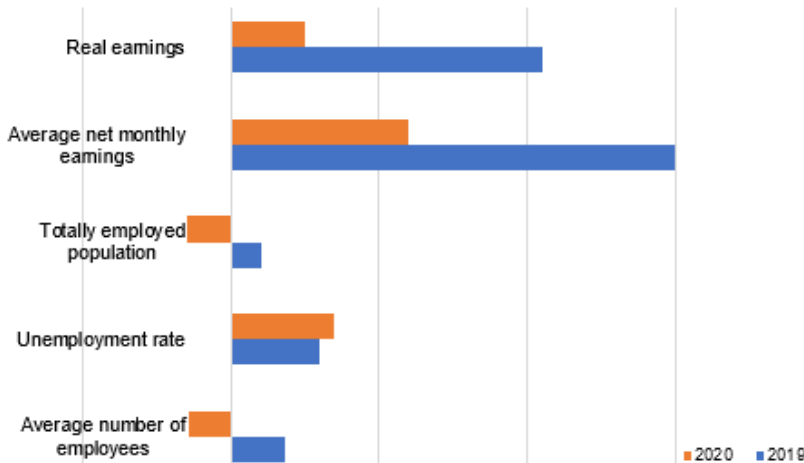


Figure 1: Evolution of earnings and employment compared to the previous year (%)  
 Source: Graphic representation of the authors, according to the data taken from the National Commission for Strategy and Forecast, [www.cnpf.ro](http://www.cnpf.ro)

#### 4.3. The economic impact of telework

Since the outbreak of the COVID-19 pandemic and until now, various articles and studies have been developed that highlight the impact of telework from an economic perspective, but nevertheless there is no consensus in the economic literature to refer to this fact. The recession resulting from the health crisis of 2020 is not generally a novelty in the history of the economy, given that over the years various bottlenecks of economic activity have been identified, they are recorded from the Middle Ages and continuing until Modern.

#### 4.4. Measures implemented by the authorities to support employees and employers

The onset of the 2020 health crisis has put fundamental pressure on governments globally, forcing them to implement a series of substantial measures that have led to a sharp increase in government spending while declining government revenue. The main measures adopted were: The main measures considered in response to the current pandemic are: measures to support businesses, granting bonuses for the payment of corporate taxes, the possibility of rescheduling payments for certain taxes due to companies facing various difficulties, granting of loan guarantees and subsidized interest for investments, accelerated repayment of VAT. Among the measures taken in the context of the Covid-19 pandemic in Romania, we can see the Emergency Ordinance no. 132/2020, measures to support employers and employees, measures of social distance, but also measures to stimulate employment, which led to the regulation of the Kurzarbeit model in the private sector. This allowance is borne

by the employer and can be reimbursed from the unemployment insurance budget, insofar as the employers fulfill the declaratory and payment obligations in accordance with Law 227/2015 of the Fiscal Code.

The graphical representation shows the economic impact of the fiscal measures implemented by the authorities in response to the Covid-19 pandemic, which determined the increase of the public debt and the deepening of the budget deficit.

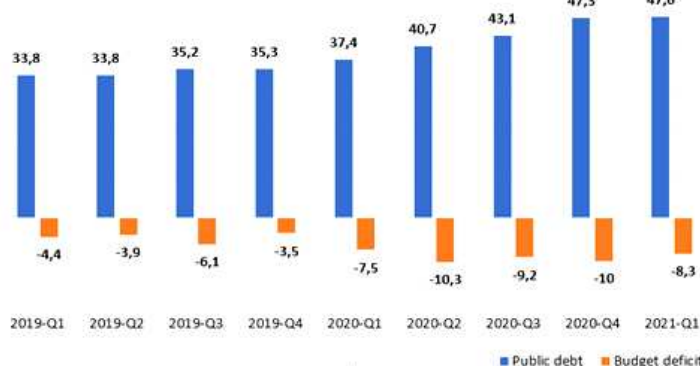


Figure 2: The evolution of the budget deficit and public debt in the period 2019Q1 - 2021Q1

Source: Graphic representation of the authors, according to data taken from Eurostat

## 5. Conclusions

In conclusion, we can state the idea that the health crisis generated by the current SARS-VOC-2 pandemic has brought with it a significant impact on the socio-economic context of all countries globally, which has led to changes in professional activities, respectively personal. Thus, resilience, flexibility and agility have become key elements of public and private sector work activities.

Finally, the budgetary impact of the measures taken by the authorities in the fight against the Covid-19 pandemic and in order to support the population and businesses is unprecedented, which has led to a widening of macroeconomic imbalances, and thus an increase in public debt from 35.3% of GDP in 2019, up to 47.3% of GDP in 2020, while the budget deficit deepened from -4.4% of GDP in 2019, to -9.2% in 2020.

## 6. Acknowledgements

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## DIGITALIZATION OF THE ECONOMY: PROJECTIONS AND THE PRESENT

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**Abstract:** *The way people carry out their daily activities has changed thanks to digitalization. The digitalization process has had its own effects, both on the economy and on societies. Opportunities offered by this digitization process bring significant potential benefits, supporting businesses in various fields to become more efficient, to use their own resources as efficiently as possible and also to develop the business model. Regardless of the field of activity, companies must adopt new technologies in order to remain competitive. They need to adopt new technologies in order to meet the challenges of the market. Thus, this paper aims to make a brief foray and analysis of the official document that deals with, plans and designs the digital economy. These are a set of projections of the digitalization of the economy. Moreover, this paper seeks to make or brief presentation of the current framework of the digital economy.*

**Keywords:** economy, digitization, digital economy, official documents, projections.

**JEL classification:** A19, D83, O33.

### 1. Introduction

Named in the literature and in the specialized field as a "new economy", the digital economy requires the use of information technology, in order to achieve the main business processes, namely planning, management and marketing. (R. Kling & R. Lamp, 2002). The concept of "digital economy" was first mentioned in Japan during the 1990 recession, later the term was mentioned 5 years later in Don Tapscott's book *The Digital Economy: Promise and Danger in the Age of Networked Intelligence*. (1995). This is the first paper that talks about how digital networks will influence the business environment

The impact of digitalisation on the economy has become an area of intense research by economic analysis offices and other agencies. The first interventions of the European Commission in the field of digitization were made in 2000. The European Union institutions understand at that time the importance of the Internet and technologies in the business environment and thus, "digital law" becomes one of the ten priorities of the year 2000.

In 2010, the European Commission launches the "Digital Agenda for Europe", the first of seven initiatives in the Europe 2020 Strategy for Sustainable Growth. This agenda was the successor to the ICT strategy "i2010" of the European Commission 2005-2008. This Agenda proposed a much broader scope, with the aim of stimulating the European economy by providing sustainable economic and social benefits. Its areas of action included: creating a digital single market, exchanging information and setting standards, trust and security, fast and ultra-fast internet access, research and innovation, improving literacy and digital inclusion, the benefits of ICT to society, other international aspects of the digital agenda. (European Commission, 2010).

## **2. The current situation and projections of the digitalization of the economy**

One of the newly launched concepts with the Digital Agenda for Europe was the "digital single market", which later became a 2015 strategy that included a series of initiatives to remove barriers to cross-border e-commerce and stimulate investment in T.I.C. Thus, the D.S.M (Digital Single Market) strategy represented for the period 2014-2020 a point of great interest.

The OECD (2015) presents in the OECD Digital Economy Outlook 2015 report the possibilities of capitalizing on the potential of the digital economy as an engine for innovation of countries, targeting numerous sectors of activity and industries. According to the report, there is a huge potential for companies to adopt and use the Internet and digitalization in all sectors. O.E.C.D. governments are increasingly aware of the need to develop the digital economy and thus want to stimulate economic and social growth through national digital agendas. (O.E.C.D, 2015) At the same time, in 2015, the United Nations launches the post-2015 development agenda. It sets out a number of sustainable development goals, including internet access to create an inclusive and global digital economy.

The O.E.C.D Digital Economy Outlook Report of 2017 has the following main ideas: O.E.C.D governments meet the challenges of digital transformation in all branches of the economy; communication infrastructure and services are being modernized; the use of T.I.C is unequally distributed between countries, between companies and between individuals; digital innovation and digital transformation bring important changes to the labor market; concerns about digital security and privacy limit the widespread adoption of T.I.C and business opportunities; artificial intelligence raises a number of political and ethical questions; the potential of the blockchain faces a number of technical obstacles and political challenges. (O.E.C.D, 2017).

In 2020, the OECD launches a new report, namely Digital Economy Outlook 2020. The current COVID-19 pandemic has amplified all aspects of digital transformation and the way countries interact with digital technology. At the same time, he highlighted the need for a more inclusive approach to digital transformation. OECD countries are strengthening their strategic approach to digital transformation policy, so by mid-2020, 24 OECD countries had a national strategy aimed at digitizing the economy.

The report also highlights the implementation and the effects of the digital divide. There are major differences between large firms and small firms. If for large companies, e-commerce represented in 2019, 24% of turnover, for small companies, the share represented was 10%. Such gaps also exist among individuals, the differences in use by age groups and level of education persisting to date.

The measurement of the progress in which the member states of the European Union act in the direction of a digital economy is made through D.E.S.I. indicator (Digital Economy and Society Index). This indicator refers to five major areas, namely: connectivity, human capital, internet use, digital technology integration and digital public services. (I.N.S, 2020)

The data provided by this index reveals the current situation of Romania in this context, thus, in terms of connectivity, there is an upward trend 2014-2017 and a maintenance trend with small decreasing influences in the period 2017-2019. In the field of internet services use, the digital environment shows an accelerated growth, so in 2019, 71.6% of people used the internet regularly, an increase of 23.9% compared to 2014. Moreover, a significant increase it was also found among online transactions. Digital technology in enterprises is also presented in the report. According to him, the digital sphere provided 7.4% of turnover, 10.3% of enterprises bought cloud services, which is implicitly a trend of digitalization in enterprises and SMEs receive more and

more digital orders and the share of companies who used social networks in 2019 was 33.2%.

At the level of the European Union, this indicator shows similar trends and an upward trend. Internet use has increased year by year, with 85% of Europeans using the internet at least once a week. At the EU level, the purchase of cloud services accounts for much higher percentages from companies, namely 38.5%. General connectivity and digitalization of households have improved significantly, and human capital has also increased in the context of the skills of internet users. (I.N.S, 2020)

### **3 Harmonization of digital markets**

The harmonization of digital markets has remained one of the European Commission's clear objectives over time and one of the key policies through which the EU supports its Eastern European partners. For this purpose, the project called EU4DIGITAL was born. It aims to expand the Digital Single Market to Eastern partners, contributing to economic growth, creating new jobs, improving people's lives and supporting the business environment.

In this context, the EU supports the reduction of roaming charges, the creation of a high-speed broadband network which in turn will contribute to the growth of the economy, the expansion of online services and a coordinated and organized cyber security. These measures help to remove barriers to pan-European online services for citizens, administration and business. Under these conditions it will be easier to attract investment, sales will increase, and launching and developing a Start-up will be much easier.

The European Investment Bank also writes about Digitalisation in Europe 2020-2021 in the Digitalisation in Europe 2020-2021 Report. It is a balance of the evolution, the pace of adaptation of digital technologies and implicitly of their impact both in the European Union and in the United States. The report highlights a number of issues specific to the digitalisation of the economy.

In the first instance, in order to achieve sustainable growth, Europe must embrace and tap into the potential of digital technology. Asked by the European Investment Bank, a significant percentage of EU companies believe that this process of business digitalization has been accelerated by the COVID-19 pandemic. Another trend mentioned in the report is the importance of adopting digital technology in order to remain competitive in the market. Very large discrepancies between countries are also mentioned in this report. A measure mentioned in the report of the European Investment Bank aims to identify and solve the problems that hinder the evolution of digitalization.

In this context, in order to boost the development of this sector, the EU has launched the Digital Europe Program, which provides funding focused on the digitalisation of businesses, public administrations and citizens.

In parallel, the Connecting Europe Facility (C.E.F DIGITAL) program focuses on the development of digital infrastructure in the transport, telecommunications and energy sectors, all of which have clear influences in the field of tourism. Some important issues are: the development and wider coverage of high-capacity networks, including 5G; increase the security, resilience and capacity of the main EU networks, boost the digitalisation of energy and transport networks.

The OECD report on "Digitization: policy-making, improving lives" contains information on the need to reduce the gaps that exist in order to address the opportunities of the digital age, considering that a deeper understanding of the need

for these changes is imperative and affects the whole economy and society. (O.E.C.D, 2019)

On digitalisation and sustainability, in 2021 the European Economic and Social Committee launched an exploratory opinion setting out a series of recommendations, proposals and requests as follows: calling for policies to establish a digital economy, enabling workers, consumers, SMEs large companies and non-profit economic operators to benefit from it equally, the demand for transparent, fair and environmentally friendly ICT production chains and an extension of the EU Ecodesign Directive, the demand for appropriate policy measures to help strengthen type: increased use of ICT that has mitigated energy-intensive work practices and lifestyles as a result of the pandemic, recognition of the key importance of developing sustainable smart cities (European Economic and Social Committee, 2021)

## Conclusions

However, the current situation in Europe reflects a conventional digital divide. Moreover, the current situation of regulations is uneven, with each country approaching them in its own way and having influences from the major economic powers. While some countries enjoy unlimited capabilities to turn data into digital intelligence and business opportunities, which are later used for economic and social development, there are also some countries whose capabilities in this area are limited, thus speaking of a disadvantage.

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## ICT ACCESS PROBLEMS OF PERSONS WITH DISABILITIES DURING AND POST PANDEMIC (COVID 19): A CONCEPTUAL MODEL

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**Abstract:** *During pandemic (Covid 19), information and communication technologies (ICT) have become an important tool that not only stimulate the process of integrating people with disabilities into society, but also contribute to their economic independence. This article presents the results of an interdisciplinary literature review and, based on it, the development of a conceptual model for the study of factors and approaches that hinder the access of persons with disabilities to ICT. The article claims that this circumstance affects the development of their social integration, develops economic independence and played a significant role in the post-pandemic period (COVID 19). When forming a conceptual model, the article identifies three approaches: legal, socio-economic and political, and also suggests five factors: institutional, administrative, accessibility, economic efficiency and educational, which affect the accessibility to ICT of persons with disabilities.*

**Keywords:** persons with disabilities, information communication technology, employment, quality of life, labor policy, access.

**JEL classification:** J08

### 1.Introduction

The pandemic (Covid 19) has created many problems in the world for all mankind, has affected all areas of human activity, and has not spared the vulnerable categories of the world's population. During this period, due to ICT, many jobs were saved. ICT has played an important role in the life of many organizations and groups of people, covering all spheres of society (education, healthcare, business, etc.). As for the state of ICT, the pandemic has also had an impact on them, but the impact is twofold. On the one hand, the pandemic has aggravated the alarming side effects of ICT, on the other hand, it has become a lifeline for almost all spheres of life, has taken an important place in the preservation of organizations, jobs, etc. (Parra, Gupta and Mikalef, 2021). Unfortunately, today, despite the growth and coverage of digitalization, the "digital divide" is growing in society. Since persons with disabilities are still less covered by decent work and have less income, the possibility of access to ICT remains an urgent problem for them. These and other causes of digital inequality urge us to study the factors that hinder access to information and communication technologies for people with disabilities in order to solve this problem by increasing the level of interest of politicians, to find opportunities for their development, further social integration and growth of economic independence. These circumstances led us to develop the theoretical foundations and create a conceptual model designed to solve this problem. The purpose of the study is to determine the constraints on access

to ICT for persons with disabilities and identify approaches to finding this solution. In this regard, the purpose of the study led to the formulation and choice to solve the following research questions:

**R.Q:1** What are the factors that hinder the accessibility of ICTs for persons with disabilities during and post-pandemic (Covid 19)?

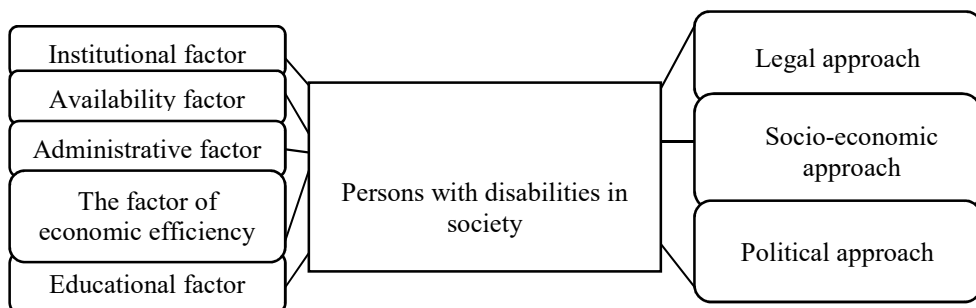
**R.Q:2** What action should be taken to the state to solve ICT accessibility for persons with disabilities?

## 2. Theoretical basis

Today, technology is one of the relevant factors that helps citizens with special needs to develop personal independence and self-determination and raises self-esteem. Unfortunately, persons with disabilities do not have broad access to digital ICT, as they lack resources, practical skills and the necessary knowledge (Sourbati, 2012). The low level of ICT use by people with disabilities is due to the presence of constraining factors. These constraining (hindering) factors lead to a digital divide, and the digital divide, as one of the most pressing problems, creates inequality among citizens.

### 2.1 Conceptual model

The analysis of the literature carried out in the course of the study made it possible to identify factors that hinder the possibilities of access to ICT for the development of social inclusion of persons with disabilities. These factors include: institutional factor, accessibility factor, administrative factor, educational factor, economic efficiency factor. These factors are directly influenced by three approaches: legal, political and socio-economic approaches. The conceptual model proposed by us (Figure 1) indicates the existence of a relationship between the hindering factors affecting the successful inclusion of persons with disabilities in society and the expected results of the relationship. Further, we provide detailed information on these hindering factors of access to ICT for persons with disabilities and the approaches influencing its solutions.



**Figure 1:** Conceptual model reflecting the identified obstacles and approaches to ICT access for persons with disabilities

Source: Based on own research

### 2.2 Constraint factors

#### 1. Institutional factor

Institutional factors include the understanding that technologies do not create dependence for people without disabilities, but are considered "auxiliary" for people with disabilities and create dependence on them. Such thinking is an obstacle in creating and implementing digital accessibility for people with disabilities (Kulkarni,

2019). The current attitude and understanding of accessibility to technology, on the one hand, may seem insignificant, on the other hand, this incorrect approach can lead to the emergence of more complex barriers, such as discrimination and stigmatization. After all, solutions follow precisely from an understanding of the adequacy and relevance of the problem.

#### II. Availability factor

The availability factor refers to the accessibility of ICTs and their ability to be used for people in need with different types of disabilities. Such, for example, the availability of such ICT products as IT to help in memorizing and performing tasks, support physical activity of persons with disabilities in everyday life. For people with cognitive impairments, PDAs, smartphones and similar products with software for prompts (audio verbal, graphic, video prompts) of the task sequence are needed. It is necessary to take into account in the process of developing technology the needs of individuals with disabilities, the possibility of adapting products to different conditions, as well as training users themselves to use these products (Brandt et al., 2020).

#### III. The factor of economic efficiency

In many developing countries, only a small number of persons with disabilities are covered by decent work. Those who receive social benefits from the state cannot afford expensive equipment for inclusion in society. The high price of a variety of high-end wheelchair options and devices confirms the fact that the assistive technology industry mainly specializes in manufacturing for high-income citizens. Many of them are available in limited quantities. Affordable designs of assistive devices that come from manufacturers in sufficient quantities are often not suitable for people with disabilities, do not correspond to their physical, social and cultural environment and they have to abandon them (Brown et al., 2020). The high cost of equipment for persons with disabilities is the main obstacle due to the low incomes of these citizens.

#### IV. Administrative factor

Responsible decision makers during the pandemic regarding the use of digital technologies should not be guided by data patterns, as they themselves are changeable and incomplete. At the same time, the objective inclusive decision-making processes should not be limited to superficial cooperation. The most correct way is to focus on the person and his problems. That is, it is always necessary to put a person in the first place in decision-making processes. This waste should become a guiding principle when making a decision. Administrators should be wondering not in terms of what, what can be done? And to put and answer the question - what should be done (Doyle and Conboy, 2020). And here, in making the right decision, a significant place is given to the application of the legal approach.

### **2.3 Approaches that solve the problem of accessibility of ICT for persons with disabilities**

#### I. Legal approach of ICT accessibility for persons with disabilities

Scientists Rachele et al., (2020) argue that clarifying many questions about people with disabilities requires the use of two approaches. The first of them is a carefully prescriptive approach to justice. The second is related to considerations of expediency, responsibility, competence, availability of resources and actions of responsible authorities (Rachele et al., 2020). Ferri and Favali., (2018) propose a solution to the lack of web accessibility with the help of legal norms that will ensure compliance with all standards (Inclusion, 2018).

#### II. A policy approach to ICT accessibility for persons with disabilities

To address ICT access, the authors propose: to develop and implement an ICT policy; to consider the accessibility of ICT from the point of view of various types of disability;



to develop programs to ensure accessibility to ICT; to use government incentives in the form of subsidies. Government programs include direct financing and administration of programs of state and local authorities. Various government programs may include funding for programs that are managed by the authorities. The activities of public-private partnerships (public and private institutions, etc.), market initiatives (private parties, industry consortia) that develop and distribute products or services, consumer initiatives (consumer groups, etc.) are important here (Jaeger, 2006).

### III. Social-economic approach of ICT accessibility for persons with disabilities

Social integration of persons with disabilities cannot be achieved only through the development of ICT. Factors such as the labour market, the political sphere, and the educational factor are directly related to the achievement and development of social integration not only of persons with disabilities, but also of all citizens around the world (Manzoor, 2018). For the development of ICT access, the socio-economic access of the country also affects citizens to a large extent.

### 3. Recommendations

- Investments in information and communication technologies for persons with disabilities are needed;
- Subsidies are necessary to create jobs and purchase advanced technologies for people with disabilities;
- Collaboration of stakeholders, responsible persons and consumers of ICT is required, clarifications in regulatory documents;
- It is necessary to search for alternative types of financing of expenses for teaching digital literacy to people with disabilities.

### 4. Conclusions

During the pandemic, the whole world was captured by unforeseen circumstances, especially people with disabilities who do not have opportunities for social inclusion every day due to their physical limitations suffered. With the help of innovations, the world was able to minimize the damage in the educational process. However, we need solutions to the problems of access to ICT for people with special needs, for their further development and continuing education in the post-pandemic period, the development of economic independence through access to ICT. Such decisions should be made on the basis of mutual understanding and solidarity by government politicians, interested public representatives and ICT consumers (Leach et al., 2021). During the pandemic, we have all witnessed inequality in relation to people with special needs who, due to their insolvency, do not have access to ICT. Based on the literature review in this article, we have presented a conceptual model that demonstrates the relationship between the hindering factors and approaches, the application of which reveals ways to solve them. Persons with disabilities, as the most vulnerable category, need to be considered and the solution of these problems is more in the economic field. Researchers interested in this field of topics should determine further ways to develop the economic independence of these citizens in each individual country, based on its capabilities and specifics. During the post-pandemic period, the development of the employment level of persons with special needs depends both on the use of the economic potential of the State and on the availability of human solidarity and mutual assistance in solving this problem.

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# EVALUATION OF PERFORMANCES FOR NON-PROFIT ORGANIZATIONS

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**Abstract:** *This paper concentrates of non-profit organizations and their performances. If is business organizations the performances is usually measured by profitability, and non-profit organizations have other goals and it is not easy to decide what should be measured, evaluated and how. What is the role of a manager in such an organization? How can we identify a successful manager? It is worthy to mention, this claim is controversial. Some of its external supporters see a manager as a person standing at the head of the organization and influencing its nature and culture greatly. Others claim that a manager's influence is only one of many, so it is not so important. There is also an opinion that because there is no agreement about the definition of a successful organization, the examination of connection between the organization and its manager is not relevant. Anyway, the relations between managers and performance in non-profit organizations are even more challenging than these of business organizations.*

**Keywords:** non-profit organization; organization performance; performance organization; manager role in non-profit organization.

**JEL classification:** A13, L30.

## 1. Introduction

This paper concentrates of non-profit organizations and their performances. If in business organizations the performances is usually measured by profitability, and non-profit organizations have other goals and it is not easy to decide what should be measured, evaluated and how. What is the role of a manager in non-profit organization? How can we identify a successful manager? (Ritchie et.al., 2004). It is worthy to mention, this claim is controversial. Some of its external supporters see a manager as a person standing at the head of the organization and influencing its nature and culture greatly ( Gal,2006). This opinion is especially supported by a research that distinguished an influence of personality and management characteristics of entrepreneurs on achievements of organization they established (Sharir, 2003). Others claim that a manager's influence is only one of many, so it is not so important. There is also an opinion that because there is no agreement about the definition of a successful organization, the examination of connection between the organization and its manager is not relevant. Anyway, the relations between managers and performance in non-profit organizations are even more challenging than these of business organizations.

## 2. Definition and evaluation of performances for non-profit organizations

Non-commercial organization is the organization whose main goal is not a profit, and it does not divide its profit between the participants. This kind of organization is established for reaching social, beneficiary, cultural, education, political, scientific and managerial purposes, in the fields of taking care of the health of citizens, development of culture and sports, providing spiritual and other non-material needs of citizens,

protecting their rights, legal interests of citizens and organizations, solving conflicts, supplying legal aid, and also acting in other directions, in favour of social goods. Non-commercial organizations can involve in entrepreneurial activity, only if this activity is aimed at the reaching of organization's goals (Simkovich, 2017).

Non-profit organizations in a modern science are divided into three social groups: public, commercial and non-commercial. Non-commercial organizations are by default cannot be part of a commercial sector, but relating a non-commercial organization of a public or non-commercial centre can be determined by a set of factors and is often subjective. The following table summarizes characteristics of the three sectors: There are some main categories of non-profit organizations:

- The governmental sector: government departments and entities using for the government needs, like army, police;
- Local authorities who work in close cooperation with the government;
- The third sector: organizations who do not belong to the two previous categories, and act in a wide variety of fields like arts, sports, religion, politics, research, charity to the needy, helping some specific populations;
- Organizations for the favour of public;
- Public dedication: a private person who dedicates her property for a public cause.

Although non-profit organizations always act without any intention of making profits, and all the incomes they make use to finance their own activity, a profit still might be made (a surplus of incomes over costs). This profit is cumulated then as a non-profit organization property and is not divide between its owners, unlike any organization with intention of profit.

It is complicated to define a quality of performance for a non-profit organization and to decide what is effectiveness in such an organization, however the public, contributors and governments do demand to evaluate performances and achievements of non-profit organizations, in order to solve social problems (Sawhill and Williamson, 2003). The demand comes from the public sector managers who feel frustrated since they cannot make a real change in spite of the efforts invested (Capers, Collins and Goonerate, 2008).

It is natural that an initial definition of effectiveness describes the ability of an organization to achieve its goals (Wing, 2004). However, this approach was decided to be a problematic one, since it does not supply an answer for organizations with many goals, and it was suggested that organizational effectiveness of non-profit organizations is multi-level and should include a series of goals and expectations (Herman and Renz, 2004).

In order to deal with this claim, some theories were developed describing effectiveness of non-profit organizations' interactions with their surrounding (Sowa, Selden and Sanford, 2004), and theories concentrating on factors of inside-organization resources. Since non-profit organizations' goals are the social ones, they are difficult to measure. That is the reason there are points of non-agreement about the methods of measurements of non-profit organizations' achievements. The demands of stakeholders to "see some results" are embarrassing, especially when each one of them provides a different explanation about the desired outcomes, which causes the managers a confusion and helplessness (Sawhill, and Williamson, 2003).

Although it is agreed among the professionals that performance evaluation is a must in order to check out the general situation of an organization and maintain a decision making process (Carson, 2000), there is a plenty and non-uniform group of evaluation parameters. The non-uniformity is especially prominent when there is a try to evaluate the organization outcomes, and there is a variety of terms and key words, like

outcomes results, impact, outputs, third sector and more ( Twersky, 2008). Like the business sector, in the non-profit one also the researchers try to answer the question what are the factors of improving the organization's chances to succeed. Some claim that the success factors of non-profit organizations are very similar to the ones of the business companies (Dart, 2004). This claim is supported by an explanation that non-profit organizations' activity is very similar to the one of business organizations, like developing products and services. Like businesses, they have to be competitive and to deal with financial difficulties. This approach is not supported in the social field, where it is claimed that social organizations are essentially different from the business ones, which makes them to be managed differently, and any study of factors predicting a success in the business sector will not be applicable in the social sector (Anheier, 2000). This big confusion, altogether with some tries to find tools to improve the chances of organization to bring about a real social change, caused the appearance of the Theory of Change (Anderson, 2006). This theory proposes some main factors influencing achievements of non-profit organizations, naming by the way the ability to connect between organization outcomes and its central goals, to define clear measurements, to create organizational processes consisting of goals definition and providing the staff with professional tools. The difficulty to define and measure achievements in social organizations limits the possibility of identifying factors that can help to reach the goals. However, the measurement process must supply an answer to the multi-dimensionality of goals and a multiplicity of levels of organizational processes for non-profit organizations (Sowa, Selden and Sandfort, 2004). In order to define factors of success, there is a need to relate to the organization's character, the main destination of its establishment and its main activity.

### **3. Managers' performance in non-profit organizations**

The claim there is a connection between an organization's achievements and its manager's achievements brings about the following question: how can we identify a successful manager? (Ritchie et.al., 2004). It is worthy to mention, this claim is controversial. There is an opinion that because there is no agreement about the definition of a successful organization, the examination of connection between the organization and its manager is not relevant (Johnson and Geal, 2005). Most of the models which define what are the managerial performances and how can they be measured base on two kinds of management: tasks management and human resource management, and part of them define the success of a manager as an extent of her ability to balance between these two kinds (Collins, 2001). There are also approaches that examine a manager's ability to be a successful leader and create a motivation and stimulate her workers, and also to be a manager conducting the formal tasks like: planning, tracking and control (Collins, 2001). In addition to definition of a successful manager, there are questions of factors of building up management styles of managers. A wide view of this issue identifies three factors: a manager's personality, including her values; a manager's state towards managerial tasks and her role perception; professional skills stemming from knowledge and experience of a manager (Collins, 2001). These explanations lead to a question whether and how management styles influence the organization's achievements. Answers to this question are often connected to definition of a manager's function. Therefore, theories which empathize a human resource management in an organization claim that organization achievements are especially influenced from the quality of managing the human resource (Druker, 2011), whereas other theories point out the tasks fulfillment as the most influential factor for the organization success (Matrangolo, Eddy&

Lorenzet, 2004). However, most of the empirical and theoretical models combine a number of factors: "soft" skills like building a vision for employees, and formal patterns of decision making, building up values implementation, ability to use a model for workers, building an organizational strategy and following up the conducting of tasks (Drucker, 2011). The dynamics factors add up to the mentioned above factors, and it is based on the assumption that organizations grow up and change, which makes a manager to fix her management patterns (Adizes and Griffin, 2000). Out of these approaches, and in try to answer in detail what is the connection between manager performance and organizational achievements, "The full range leadership" model was developed by Avolio and Bass (1991). According to this model, in order to reach the best management skills and to promote the organization's goals, the manager is required to use her various abilities, both as a leader and as a tasks manager.

#### **4. Conclusion**

This paper concentrates of non-profit organizations and their performances, the role of manager in such an organization. There are plenty of models, theories and approaches, but still the issue is controversial and requires more research.

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# THE CORRELATION BETWEEN MINIMUM WAGE, AGE DEPENDANCY AND UNEMPLOYMENT IN ROMANIA BETWEEN 1991-2021

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**Abstract:** *Unemployment rate is frequently debated in the academic field. It was a common theory that a higher minimum wage will result in unemployment, as the supply of labour will exceed demand. The present paper is presenting a multiple regression model in order to highlight the influence of gross minimum wage and age dependency ratio, old (% of working-age population) upon unemployment rate. Age dependency ratio was taken into consideration since Romania is experiencing a fast demographic aging, along with the rest of Europe. The analysis of the presented data shows that an aging population represents a challenge to the fiscal and macroeconomic stability of many states, including Romania. Increased government expenditure on pension, health care, and social aids programs for the elderly hurt economic growth, and has a significant influence upon the unemployment rate.*

**Keywords:** unemployment; gross minimum wage; age dependency ratio; Romania; labour market

**JEL classification:** C01; E24

## 1. Introduction

For many years it was a common theory that a higher minimum wage will result in unemployment, as the supply of labour will exceed demand. After all, it is the law of supply and demand. Advocates claim that a higher minimum wage supports jobs creation and economy growth. It helps in fighting poverty and reducing wage inequality. Opponents highlight that minimum wage is the root of unemployment, and in fact harm the low-income individuals that were hypothetically helped. Meanwhile the course of demographic aging has worsened along the recent years. At the global level, an estimated 962 million people were over the age of 60 in 2017, and Europe is having the largest percentage (25%).

According to World Bank, life expectancy in Romania in 2019 reached 75,5 years old. It has been observed a significant increase of 4.342 percentage point in the elderly population (65 years old and over) in only 5 years (2015-2020). The fast deterioration of the ratio between the productive population and the number of senior citizens is an indicator for an accelerated aging population. In 2020, Romania registered the lowest number of new born children since 1930 (INS, 2021). In the same year, there was an increase of 19% in the number of deaths compared with 2019. These led to a negative record in the mortality versus natality score. Taking all of the above mentioned into consideration, the Romania labour market is experiencing some challenges and it is expected to face even more challenges in the future.



## 2. Literature review

There are numerous papers studying the effects of different variables upon the unemployment rate. There are multiple factors influencing the unemployment: demographical, economic, social, free will, and so on.

From demographic perspective, some papers found that age has a strong effect, while background characteristics as ethnicity has a moderate effect upon unemployment rate (Marks & Fleming, 1998). From economical perspective, many researchers linked the high unemployment rate periods to various recessions. According to a study found in USA minimum wage had an effect upon unemployment rate in the pre-, during and post-recession (Greer, Castrejon, & Lee). Similar findings were observed also for OECD countries ((Raja) Junankar & Madsen, 2004). Another paper studied the correlation between minimum wage and youth unemployment, and it concluded that their relationship is a positive one with a coefficient of 0.01 (Griffith, Paull, & Smith, 2015). However, in 1994 David Card and Alan Krueger used a natural experiment to show that in reality minimum wage does not affect employment, though this is an unambiguous theory (Card & Krueger, 1994). In 1958, A. W. "Bill" Phillips observed that unemployment and inflation have an inverse relationship, and this later will be known as Philip`s Curve. He also concluded that there is a certain interval for unemployment rate- 6 to 7% where the wages are stable. When unemployment rate decreases, there is an increase in wages also. (Kitov, 2017).

## 3. Research context

Out of all our resources, one category prevails in matter of importance: human resource. At individual level, unemployment might cause serious negative consequences. Experiencing long and/or frequent periods of unemployment can cause psychological problems, marriage breakdowns, domestic violence, drug abuse, crime or suicide. At economic level, unemployment has a significant effect upon other macroeconomic indicators. Economists tend to believe that economy should be stimulated through both fiscal and monetary policies in order to create demand for labor. However, before taking any action it is of utter importance to understand what factors influence unemployment.

Values for unemployment rate (out of total labor force) in Romania for the last 30 years were analyzed (1991-2020). As a mean, we have the value of 6.674%. The minimum value is 3.91% registered in 2019, and the maximum value is 8.26% registered for two years in a row-1992 and 1993.

Gross minimum wage represents a point of interest for Romania, as salaries are low relative to the rest of the European Union. However, they are anticipated to grow quicker than the European Union average as the Romanian economy catches up (D'Adamo, Hesse, Hartley, & Bîea, 2019). Indeed, it can be observed a significant increase as in 2020 the gross minimum wage reached the value of 472,36 euros. The average value in the analyzed period was 132.75 euros.

The age composition of a country population determines a pattern of development. Certain age groups have different impact on both the environment and on economy as a whole. Although some elderly people are part of the labor force, and many working-age people are not. Therefore, the model has its limitations due to the nature of the indicator. For Romania, age dependency ratio-old has almost doubled in the last 30 years: in 1991 we registered the minimum value of 16.3%, while in 2020 the maximum value of 29.5% was reached. An aging population adds pressure of the working-age population, slows the growth of GDP and of economy as a whole.

#### 4. Research findings

We have chosen a dynamic multiple regression model, as it has proven its usefulness in building rapid estimates. In particular, this model with non-lagged variables has demonstrated to be quite efficient and parsimonious at the same time, particularly for estimating macroeconomic indicators (Bacchini, et al., 2017).

For us to check if the model is valid, we will assume in the null hypothesis that all predicted dependent variable have the same value, therefore there is no slope. The alternative hypothesis will state that we can identify at least two predicted values of the dependent variable which are significantly different.

In our model, multiple R equals 0.766 and it is situated within the limits [0.75, 0.9), therefore we can state that we have a strong intensity correlation model. If only the gross minimum wage and the age dependency ratio-old would influence the unemployment rate, they would explain 58.77% of the variance, disregarding other factors. If we take into consideration the influence of other factors also, then they would explain only 55.71% of the variance. We have constructed the multiple regression equation, where unemployment rate= UER, the gross minimum wage =GMW, and the age dependency ratio, old (% of working-age population) = AGR

$$\mathbf{UER = 7.0805 - 0.0074 * GMW + 0.26 * AGR + errors}$$

We can observe that for one additional point we will have a decrease in the unemployment rate of 0.0074 points. This confirms the findings of David Card and Alan Krueger. There is little influence from the gross minimum wage upon the unemployment rate. However, for one additional point in the age dependency ratio-old we will have an increase in the unemployment rate of 0.26 points. This represents an interesting finding, considering also the fact that in the last 30 years the ratio of elderly has almost doubled in Romania. ANOVA method was used for testing the validity of the model, and we observe that significance F equals 6.38E-06 which is lower than 0.05, therefore the possibility to commit the error of type I is almost null. Taking this into consideration, we can say that we have a valid multiple regression model. In our model p-value is also smaller than 0.05, therefore the chances to wrongly state that the slope is significantly different from zero are less than 5%, enforcing the statement that the model is valid.

#### 5. Conclusions

The analysis of the presented data shows that an aging population represents a challenge to the fiscal and macroeconomic stability of many states, including Romania. Increased government expenditure on pension, health care, and social aids programs for the elderly hurt economic growth and unemployment rate. For monetary and non-monetary reasons, labour represents an essential element of the individual well-being. Reintegrating elderly into the labour market might be a solution. Remunerated labour contributes not only to financial well-being of the individual, but also to emotional welfare. Also volunteering, care or artistic work, could deliver the same psychological advantages. As the effects of the sanitary crisis continue to unfold, the unemployment rate will suffer changes and opportunity for further research arises. Other factors of influence might be analysed in order to have a better understanding of unemployment rate dynamics.

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## ETHICAL MANAGEMENT IN SPORTS

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**Abstract:** The facts of nature are uncertain; the economic, social, financial environment of the companies change incessantly; the acts of man -because he is free and endowed with imagination -as the relationships between men- because they are not robots are the deep causes of uncertainty. Sports as a social and economic phenomenon in expansion, contribute greatly to the strategic objectives of solidarity and prosperity of nations such as promoting peace, understanding between nations and cultures, as well as the education of young people, the promotion of values and physical activity beneficial to health. The new challenge that organizations will face in the future will lie in the ability to manage, group, assimilate and select the large volume of information generated by the environment with a greater speed of response. Currently the globalization of the economy and the high competitiveness in national and international markets has made it even more difficult to meet the objectives of economic growth and profitability of states and companies, which in turn are reflected in the social welfare of people affecting their environment. One of these sectors is the sports field, which has become a social and economic phenomenon in the last decade due to its ability to connect social well-being with economic benefit simultaneously and causes synergies with various fields due to its transversality.

**Keywords:** sports; ethics; economic benefits; transversality; social welfare.

**JEL classification:** Z29.

### 1. Introduction

Sport is a human activity that is followed by millions of people, some when practicing it and others as spectators, fans or followers of teams and athletes in different disciplines. Due to its competitive nature, this activity encourages people to constantly improve themselves, achieve new goals, develop skills and try to position themselves at different levels according to the area where the individual develops, whether at school, local, regional, country, world level and even Olympic, the greatest aspiration of every athlete. According to Delaney and Madigan (2015) "in sports, hierarchies are precise, rigorous, evident, satisfying the spirit in its desire for order". A universe in which Bobet is the greatest cyclist in the world, in which Zatopek is the greatest rider, is an orderly universe". In this respect, he reveals the nature of the human effort to achieve greater results and demonstrate the achievements that he achieves in his discipline. At the same time, for society it is a benchmark of consecration, qualities and principles. In this regard, they also appreciate that "the athlete is immediately classified by his intrinsic value and is placed on the scale of sporting values. He enshrines, above all, the hierarchy of values on the basis of visible and measured objectivity". In sports, getting to go through the different levels of competition and in each of them achieving recognition as a champion is the guide that every athlete longs for and for which he must achieve through his dedication, dedication, effort and sacrifice.

One would point out four ways of understanding the importance of ethics in sports activity:

- The management and performance of sports organizations, where unethical management leads to corruption and short-term projects.
- Sports training and its relationship with the purposes of the training process where acting unethically leads to tend the permanence of the athlete with their ability to finance a program.
- Referred to high performance where, achievement through efforts in their training processes and performance in competitions is linked, with resistance to the temptation to improve brands through doping, foul play or disloyalty.
- Regarding social sports, he states that: sports institutions, companies and organizations must transparently communicate their objectives of promoting the integral well-being of the person in society and not use them as a mere for-profit marketing strategy.

The above presented makes us reflect on the need to address this sensitive aspect in the athletes training and much more in the training of the professionals in physical culture and sport, since they are, in the first instance, the ones who will have the challenge to prepare future generations at the height of the current moments.

## **2. Sport, values and ethics.**

Sport is a regulated physical activity, normally of a competitive nature, which should improve the condition of those who practice it and has properties that differentiate it from the game. Simon, Torres and Hager (2018) define it as a "physical activity, exercised as a game or competition, the practice of which involves training and adherence to rules"; also, in a second, broader meaning, such as "recreation, pastime, pleasure, fun or physical exercise, usually in the open air."

Sport is an activity with a variety of meanings, which are marked by the nature of its study and which has a wide complexity, it changes its meaning as it refers to an attitude and human activity centered on a social reality, or social realities. It is characterized according to the nature of the person who encourages, favors or conditions it. (Delaney, Madigan, 2015: 11)

In a study performed by Thornton, Champion, Ruddell and Ruddell (2011), about the values of sports practice, it indicates that there are three dimensions, a General, a Psychosocial and a third of Recreational Sports - Outdoors. Some of the values in these dimensions refer to: in the General to justice and honesty, self-sacrifice, self-control, loyalty, respect for others and cultural differences, humility, fair play, truth, elimination of prejudices, self-esteem, maximum self realization and international friendship. In the psychosocial and sports dimension, the value of enjoyment, fun and happiness, integrity and loyalty, self-esteem and respect, sportsmanship and respect for different and adverse points of view, emotional control, determination, health and physical well-being, friendship, empathy and cooperation; tolerance patience and humility, leadership and responsibility. In the Recreational Sports and Outdoors dimension: creative use of free time, aesthetics, enjoyment and personal satisfaction, family participation, non-competitive or friendly participation, communication and leadership, initiative-originality, independence, personal achievement, relaxation, loyalty to the team, vocational interests, among others. All these values are and must be understood to promote at any level in which the sport is practiced, be it in the community, school, a region, formal competitions at different levels (local, regional, national or international). They are values that allow to raise the performance and the importance of the achievements that the athlete achieves. Closely related to the identity that should characterize the athlete trained in values, we must then point out

that values are ethical principles with respect to which they feel a strong emotional commitment, which are explicitly manifested in a consistent and continuous behavior, as well as that mediators are constituted for the evaluation of human behavior and specifically the athlete. This reflection should lead us to interrelate values and ethics. The ethical values of the athlete have to do with the individual, it refers to his behavior in his life, according to the norms, rules and laws that organize the sporting activity and that is accepted by institutions, countries and society in its generality. Hence the need to promote them in the individual to act consistently in the practice of sport, in personal and social life.

### **3. The formation of ethical values in physical culture in Romania**

Ethics in sport has been addressed by numerous authors including Pedersen and Thibault (2018) and Lumpkin and Stoll (2011). They point out that it is excellent to use the context of sports practice for the development of social and personal values in students and athletes. For this, it is necessary to achieve an intentionality and organization of them, since only practice does not guarantee it. Although we consider this path to be adequate for the formation of ethical and moral values that form the athlete, it is also the criterion that, from the academic training of the athlete, the subject is addressed and with this it is possible to form a flexible and adequate thinking about the values that they must characterize it which will constitute basic pillars to be applied in practice and thereby achieve a harmonious link between them. In Romania, the formation of values in the professional of Physical Culture and Sports constitutes a priority. The objective should be aimed at improving the way of acting of teachers and their systematic incidence in the training of students under a Code of Ethics based on the athlete's own values, taking into account the appropriateness of systematizing in the teaching-educational process, their application with a meaning of belonging, national identity and professional commitment, to develop moral and responsible character from Physical Culture and Sports, with an Active-reflective Pedagogical approach in teaching work and its interrelation with teachers.

The organization of the specialties in the university from the model of the professional to which one aspires and moving through academic years, disciplines and subjects constitutes an essential means for their promotion. That is why from the objectives that are planted, at a macro level, they are aimed at promoting them, but it is only in the development of academic, labor, research and extension activities where it is necessary to materialize them. To achieve the formation of ethical values in professionals of physical culture and sport based on the objectives embodied in the professional model, it is necessary to previously identify them, which does not mean, in our view, that they have to be separate from the system of ethical values that must be formed in any university graduate according to a certain society. The system should be promoted in a comprehensive way, but in the case at hand, it is necessary to achieve an intentionality. The ethical values that have been studied around the practice of sport are dissimilar, however, we consider it appropriate to focus them on the following, which are integrative of others. We take as a basis the study of Lumpkin & Stoll (2011), and according to our reality, it is the criterion that these should be organized in two dimensions, one of Ethical Values at a personal level and the other at a social level.

Ethical values on a personal level- they have to do with those values that define an athlete in the personal sphere as intrinsic qualities that occur in him. In this respect, personal level values are represented by honesty, self-sacrifice, self discipline, respect for others, maximum self-realization, justice, ethical behavior, responsibility.

Ethical values at a social level- they emphasize the values of the athlete for him and for the rest of the team, the opposite or the third party (spectators, followers, fans, society in general). In this respect, social level values are represented by loyalty, cohesion, friendship, acceptance of differences towards others, cooperation and companionship, solidarity.

We consider that, in the training of the professional of physical culture and sport in Romanian, as we pointed out previously, it is necessary intentionally the formation of ethical values from the academic, labour, research and extension activities, for this they should be structured in a harmonious way a system of cohesive actions among them that contribute to its development, below, we list some activities that have been put into practice for this purpose.

Academic activity: the use of classes to promote debate and conscious reflection about the formation of ethical values in sport.

- Study of the ethical and moral values that should be part of Romanian athletes and professionals in physical culture and sports.
- Analysis and debate of cinema films that address sports issues and that promote the formation of values.
- Exchange with sports personalities nationwide.
- Development of conferences given by specialists, personalities of sports organizations in the country, etc.

Scientific activity: Direct the development of research at different levels (extracurricular research, undergraduate research, etc.) by students to topics such as: Ethics in sports, effects of doping in sports, study of sports personalities in Romania and the world among others that allow investigating science about this important issue.

Work Activity: Direct the work practice with activities in which the students of the career have to inquire about ethics in sport in scenarios similar to those they will perform in the future. In the same way, they are integrated in schools and communities to promote the practice of sport under ethical principles in accordance with society and demonstrate with their example an action consistent with it. It is a favorable scenario for future professionals to apply in practice everything acquired in their training.

Extension activity: Active participation in sporting events developed by the university at all levels, including those convened for its category at the national or international level.

Addressing ethics in sport and its training in Romania taking into account the academic, labor, research and extension scenarios is a necessity and its deepening in each of them will be the object of analysis in other scientific communications, which are the result of the investigative process of the authors.

#### **4. Conclusion**

Sport is an activity practiced by millions of people in the world and is unfortunately affected by dissimilar scourges that cloud its nobility at all levels. Meanwhile, it requires promoting in athletes an ethic that prevents them from them and elevates them to achieve better results according to their conditions, effort and perseverance. The system of ethical values to be trained in Physical Culture professionals are conditioned by the reality of our Romanian society and for their organization they have

been formed in two dimensions, on a personal level for those who define an athlete in the personal field with qualities intrinsic that occur in him and at a social level, which emphasize the values of the athlete for him and for the rest of the team, on the contrary, adversary or third parties, such as spectators, followers, fans and society in general. The formation of ethical values in the professionals of Physical Culture and Sports must be approached with an intentionality from the professional model, the discipline programs, of subjects and be specified in the class and in each of the activities of the academic components, labour, research and extension.

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## SUSTAINABLE DEVELOPMENT OF SMALL AND MEDIUM ENTERPRISES ACTIVATING IN THE FIELD OF RURAL TOURISM

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**Abstract:** *Tourism is a double-edged sword, and the economic impact of the activity depends largely on the developed, developing or less developed character of an area or space where it is practised. It also depends on the administration or, in broader terms, management of this complex activity and finality through consumption. The latter is related to both customer satisfaction and the satisfaction of the travel agency providing services, to the degradation of certain traditions and the disturbance of the economic, social, cultural, demographic and environmental balance in the local communities. This paper approaches rural tourism and entrepreneurship within a microeconomic approach. It is motivated by the fact that the most common tourist activities are small and medium enterprises, which are not always sustainable enough businesses. Hence, awakening the entrepreneurial spirit is one of the most notable challenges for the actors involved in small and medium enterprise development in rural areas. This paper highlights the role and challenges of small and medium enterprises activating in the tourism field in rural areas. In addition, the paper proposes a way for overcoming the constraints and difficulties imposed by rural communities, based on the connection between the traditional rural community and a human network existing outside the traditional territorial community.*

**Keywords:** rural tourism; development; rural area; recreation; entrepreneurship; small and medium enterprises

**JEL classification:** L83; Q26; Z32

### 1. Introduction

While research in the community tourism field has extended gradually to double-folded topics (environmental and social), they have accounted for most studies, while the economic aspects have not represented a focusing point. It is one of the reasons why entrepreneurship in the tourism-based rural areas often face sustainability challenges at the end of the public or international support projects. One should investigate entrepreneurship in rural tourism extensively to improve this situation through both quantitative and qualitative approaches. It is one of the most common issues in every rural area, in developing and developed economies alike.

### 2. Tourism-based rural communities

Within tourism-based rural communities, entrepreneurship is thought to encompass the activities carried out by operators introducing innovations in their products. It would also include innovations in production processes and the organisation of local

resource management. Ultimately, it would comprise the creation of supply. Consequently, the purpose of tourism-based rural communities is to make a change and create demand for the products manufactured by the community through the collective efforts of communities.

### **2.1. Multifunctionality**

Multifunctionality entails positive effects, and it is defined as a common product generated by agricultural production and creating benefits. Multifunctionality involves a new social role for agriculture. However, it does not mean that multifunctionality automatically generates a new income source for agricultural producers. Multifunctionality has been defined as general positive effects created due to the technical combination between tourist activity and agriculture products. It means that it is impossible to make a technical distinction from the agricultural production process. In an agrarian community, the community functions, namely the share capital of the community or the community capital (Zahra & McGehee, 2013; Knollenberg, Brune, Harrison, & Savage, 2021), ensuring the survival of the members, is crucial for generating multifunctionality. This function is the prerequisite of rural community tourism. In this respect, multifunctionality is also a consequence of the institutional community of communitarian function. Multifunctionality is not internalised, and it does not generate income opportunities automatically. Consequently, efforts are necessary to attract incomes for the parties interested in the progress of rural communities focusing on tourist activities.

### **2.2. Community tourism**

A community-based approach has been widely used in developing economies to overcome various social and economic challenges. Walzer (2009) has focused on small enterprise and entrepreneurship issues for practitioners in the context of local economic development. Robinson and Green (2011) have also tried to mitigate the gap between theory and practice within their case studies. Fink et al. (2013) have used case studies focusing on rural small enterprises from the perspective of community entrepreneurship concerning Central Europe. Haughton (2013) has collected case studies on the economic development of communities, notably in the United Kingdom and Ireland. Fortunato and Clevenger (2017) investigated the progress of communities deeply rooted in a culture based on entrepreneurship and leadership development. Despite increasing attention paid to community progress and entrepreneurship, this matter is still under-investigated in the tourism field. However, it is worth noting several case studies on community tourism (Heesup, Taeyeon, Amr, Taeyeon, & Wansoo, 2019; Manhas, Gupta, & Gupta, 2014). In this respect, we mention three major characteristics within the studies above, most of them carried out in developing countries or targeting developing countries. Hence, poverty reduction was the purpose of rural community tourism progress. To this end, community participation has been one of the favourite topics. Secondly, out of the three factors (environmental, social and economic), in the sustainability field, environmental and social factors have represented a focus point. Some studies have even approached the two aspects jointly. Thirdly, methodological/qualitative approaches have constituted the most common types of investigations.

### **3. Enhancing multifunctionality**

The issue with enhancement through market mechanism is that multifunctionality markets have not been fully determined, which means that both customers and producers often fail to recognise the relevance of the multifunctionality effects. Under

these circumstances, it is hard to enhance them suddenly; hence, we should consider a staged approach to enhancement (Ohe, 2011). Such a gradual enhancement is an innovative process, hence the name “gradual innovation”. Producers may enhance the effects as the diversification of agrarian activity progresses through the management efforts of entrepreneurs. Thus, as farm diversification advances, tourism operators have more possibilities of enhancing effects. It is often said that rural tourism is a relative example of the success of recreational components within the enhancement process (OECD, 2005). The effects of multifunctionality concern a new agrarian business by forming a new role for agriculture in society. In the initial phase, most customers and producers fail to observe the value of the positive effects generated by producers, despite producers being aware of the positive effects per se. Some producers provide recreational services not because they seek profit but because they want to cover the material costs and thus avoid losses (Ohe, 2007). Such behaviours depend on the producers’ attitudes on how they place positive effects within their agrarian business. Namely, if they see positive effects as a new income opportunity or as volunteering services for the community. It is, of course, a matter of personal choice. At a business level, rural tourism activity is still not viable. Therefore, it is necessary to advance to a new level. The network must be extended through exchanges between producers and customers to get to the next level because the extension of this network helps producers obtain several opportunities to develop new ideas for better enhancing measures. It is due to rural tourism being an intangible product, unlike traditional food production leading to tangible goods, which may be stored for a certain period. The service has a production and consumption simultaneity, which means that customers must be present physically when production takes place (Niță & Butnaru, 2005). There are two types of simultaneity: temporal and spatial.

#### **4. Conclusions**

The features of rural tourism entail two advantages. Firstly, the rural tourism market may be segmented temporally and spatially. This division creates an opportunity to develop a culture-based local tourism activity in rural areas. Tangible and intangible factors related to rural heritage (i.e., local food, traditional architecture, agrarian lifestyle, rustic hospitality) represent ingredients of culture-based rural tourism. Hence, rural tourism allows producers to mobilise on a broader scale the local resources previously unused in the case of mono-farm production activity. It provides the chance to use and preserve their rural heritage. Another advantage is that simultaneity allows exchange and feedback between producers and customers through service provision. The meaning of feedback is essential for rural tourism businesses because customers’ feedback shows the satisfaction and dissatisfaction points accurately. From feedback, producers may learn potential customers’ needs and ways to improve the quality of services. Feedback also allows them to trust their capability as producers and the rural community they grew up in as a reliable destination for tourists. If producers can manage the business efficiently, the enhancement of the positive effects of multifunctionality would be a success. This change depends on the producers’ management capacity. Hence, the software aspects (i.e., service management) are more relevant for innovation than hardware aspects in the mobilisation of rural and agrarian resources for rural tourism activity. The intriguing characteristic of rural tourism is that multifunctionality improves through rural tourism. Thus, it creates a new social value permanently (though the social value may not be viable initially). Rural tourism may create an opportunity for a new service and product

from the social value. In this respect, one should not underestimate the relevance of multifunctionality.

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## DIGITAL TENDENCIES IN TOURISM

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**Abstract:** *Digitalization becomes more and more important in many business areas. In this article will be highlighted some of the benefits that comes with the process of digitalization of enterprises in the tourism sector, as well as some of the barriers that can be found along the way. The purpose of this paper is to highlight the importance of digitalization and also to sum up some of the initiatives taken by the habilitated authorities to accelerate this process. Regarding the methodology used in the theoretical part, with some exceptions, the main sources for this paper are some public official reports and documents that promote and follow the importance of going digital nowadays and also for the nearby future. Also, some solutions implemented in some countries in order to ease this process will be briefly exemplified.*

**Keywords:** digitalization; tourism; trend.

**JEL classification:** L83; Z30; Z31; Z32;

### 1. Introduction

Tourism SMEs in the EU are generally characterized by a low level of digitization, with most of the technologies used aiming at facilitating the internal e-business operations of SMEs, for example securing hotel bookings. Many micro-enterprises are lacking in official data and there is a lack of knowledge about their digitization needs and efforts. (Commission Staff Working Document, 2021).

Some of the technological advances have deep implications for the tourism sector as follows (as per OECD 2020): mobile technologies, cloud computing, automation, advanced robotics, artificial intelligence, blockchain, data analysis, virtual / augmented reality, Internet of Things.

### 2. Benefits of digitalization

Some of the benefits of digitalization of MSMEs - Micro, Small and Medium-sized Enterprises (according to APEC 2021) allow them to:

align their businesses more quickly to market changes

manage their own success more methodically and directly

build and manage a successful digital presence by interacting online with a range of processes and technologies

adopt new forms of e-commerce models to develop their income streams

develop entirely new forms of tourism, such as new types of museums / installations, virtual art, geolocation and proximity / Internet of Things, intelligent connections for new products and services.

### 3. Barriers in implementing digital tools

Some of the barriers related to digitalization are as follow (APEC 2021):

Many tourism MSMEs simply do not know what they do not know about the digitization of business models, services, platforms, technologies and newly emerging digital tourism models and products.

many MSMEs do not have access to a skilled IT-skilled workforce, communities, organizations or advisors, and this effect is accelerated as you move away from larger cities and urban areas.

Certain communities, regions or socio-economic groups suffer additional disadvantages that affect their ability to digitize their businesses or access to digitized businesses. This disadvantage can arise from poor digital skills or educational opportunities, from financial disadvantage and a lack of access to technology, from the distance to suitable infrastructure or from social or cultural distortions

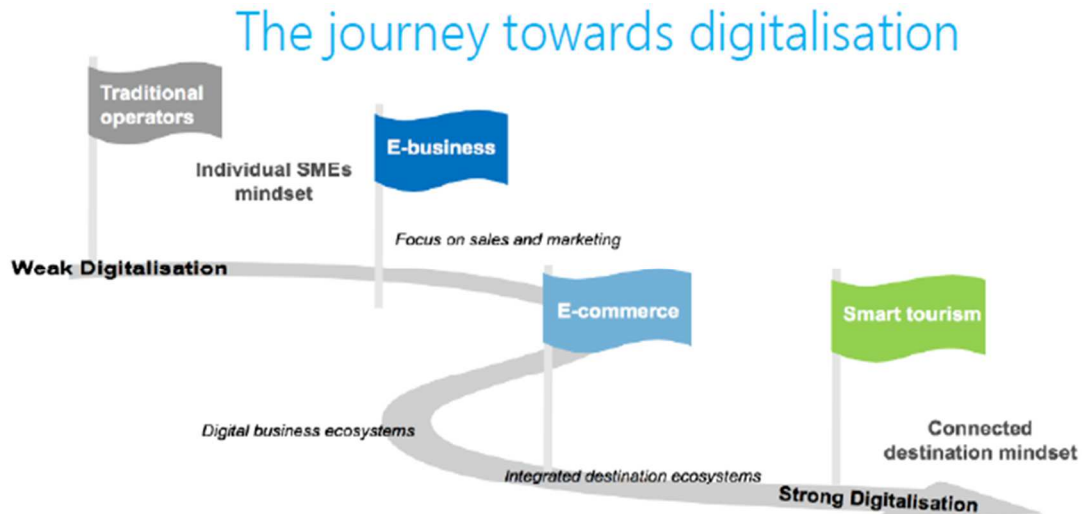


Figure 1

Source: Processed image by author based on Dredge et al. 2018, page 3.

In the image above can be noticed the path taken by a traditional operator in the tourism environment and the improvement made/ expected based on implementing some digitalization tools such as e-commerce.

In different countries there are a number of programs and platforms that support the digitization process of tourism, such as (according to OECD 2020):

France: France NUMerique is a government initiative launched in early 2019 to support and support small businesses and SMEs in their digital transformation.

Luxembourg: Fit 4 Digital initiative helps tourism SMEs to use information and communication technologies to become more competitive.

Spain: Smart Destination Reference Model designed to enable tourism destinations and businesses to successfully cope with the changes and challenges arising from the new economic, social and technological environment around the world.

South Africa: Jurni.

United Kingdom: Explorer's road road/ Visit England/ Experience Great Britain/ New Tourism Data hub.

Korea: Smart Tourism Strategy - includes a platform of integrated online tourist information, free WIFI at major tourist attractions and big data analysis for future references and improvements. The platform offers tools such as (AR / VR) chatbot services, message-based communication via translations, tourist information and tourist complaints during the trip. While the tourism big data platform is in use, it

gathers the data gathered about the tourist and shares it with local governments and the private sector to better inform tourism stakeholders.

Croatia: the eVisitor system acts as a central platform for tourism data management

Portugal: TravelBI, a new business intelligence tool, is a data hub for the tourism sector that brings together traditional data, new data sources, geospatial and open data services, and data analysis tools to convert the data into an easily digestible format for tourism companies.

Denmark: The aim of the TourismTech Datalake initiative is to support the development of new tourism business models by collecting data and making it available to tourism actors. This initiative is still in its early stages, but further pilot projects have been proposed to test data analysis with various IoT solutions.

Poland: "Open Data Plus" aims to increase the quantity and improve the quality of open public data, and popularize their use. The project implementation in tourism sector includes: modification of registers to applicable law and amending of freely available online central registers of the hotel and accommodation base, mountain guides, training organizers for Mountain Guides.

European Union: The European Smart Tourism Capital is an EU initiative that recognizes the excellence of European cities as tourist destinations in four categories: sustainability, accessibility, digitization and cultural heritage and creativity. The action promotes the development of smart tourism in the EU by showcasing good practices of cities as travel destinations. The aim of the initiative is to create a framework for the exchange of best practices between cities and to create opportunities for collaborations and new partnerships. The compendium of best practices implemented by cities also raises awareness of smart tourism tools, initiatives and projects and strengthens peer-to-peer learning and innovative tourism development in the EU. The initiative is managed by the European Commission, the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs and follows a preparatory action proposed by the European Parliament.

In Romania the Alliance for Tourism association have issued a project in which they demand, among other things for helping tourism, implementation of some steps regarding the digitalization as follows: a digital platform for promoting the Romanian tourism, a digital platform benefiting the relation between the local authorities and the actors involved in tourism activities and an mandatory online system for declaring/transmitting data relevant in order to better evaluate the decisions that needs to be taken (S.O.S Turismul românesc, 2020).

#### **4. Conclusion**

Some serious steps have been taken in the direction of tourism digitalization. With the right framework from authorities, it can be foreseen that in the nearby future more and more MSMEs will implement digital tools in order to be more competitive in a constant changing market.

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# THE CORRELATION BETWEEN LEADERSHIP STYLES AND STUDENTS' ACHIEVEMENTS IN ENGLISH MATRICULATION EXAMS AMONG ARAB/DRUZE AND JEWISH PRINCIPALS IN ISRAEL

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**Abstract:** *School leadership has proven to be important for school management and prompting students to academic achievement. The questions asked were whether there is a correlation between leadership style and high scores in English matriculation exams and whether there is a correlation between the sector to which the school belongs and leadership style and English scores. The study sample consisted of 40 high school principals, 324 English teachers and 212 parents from the Jewish and Arab sectors in the State of Israel. The findings showed that there were differences in the scores of the Jewish and Arab students, when Jewish students demonstrated higher scores. In addition, among the Jewish principals there is a higher emphasis on the quality of teachers. All students in the study responded more positively to a transformational leadership/management style than a transactional style. The main conclusion is that in order to promote students to academic achievement, empowerment is needed rather than a punishment and rewards approach.*

**Keywords:** Transformational leadership; transactional leadership; school principals; school management.

## 1. Introduction

In light of the approach that emphasizes the importance of acquiring English as an international and global language that aids in the academic and professional development of each individual, the significant of this article is in examining the school leadership styles in the two sectors, the Jewish and the Arab, that dominate demography in the State of Israel, and the principals' ability to successfully cope with teaching English. The study reveals the differences between the two sectors in terms of achievement, principal involvement, and attitudes towards teacher quality. The aim of the study is to lay the foundations for the establishment of guidelines for high school principals in both sectors in order to ultimately find solutions to problems that will arise and encourage process improvement at both the global and national levels.

## 2. Management and Leadership

Ubben, Hughes and Norris (2004) claimed that good management sets up a mandatory state of orderliness and assuredness to aspects of the school organization - a situation where new goals and processes are set as the school family faces new challenges and strives to shape a better productive future. Moreover, the authors describe the manager as a job in which one has to keep things moving correctly according to the norms that have already been set, and therefore the manager's task is to make sure that conditions are affiliated with the ingrained goals. Thus, when things are not functioning effectively, the manager makes sure that corrective action

will be executed to regain balance. Moreover, the concept of leadership is different from the concept of manager, while the leader leans on the status quo, he goes, far beyond it. The authors assumed that good leaders are managing from a leadership point of view and that a leader must have a vision, whether it is a private, public organization, a school or a business (Amanchukwu, Stanley and Ololube, 2015; Avolio, Walumbwa and Weber, 2009).

There are different styles of leadership, our research focuses on the two salient styles: transformative leadership and transactional leadership.

### **3. Transformational Leadership**

Transformational leadership was defined as superior leadership performance. Leaders extend and raise the interests of their followers when they create consciousness and acknowledgement of the aims and assignments of the group and when they direct their employees to work for the good of the group and not only for their self-benefit. Moreover, these leaders examine very carefully the difference among their employees and thus they operate as mentors to the ones who require assistance in order to grow and flourish (Bass, 1996). Transformational leaders have followers who are committed to a shared goal or vision and are more content in their positions, therefore, this type of leadership obtains the potential of highly influencing the organizational climate of the campus (Bass and Riggio, 2006). Consequently, transformational leadership has also a potential to influence student achievement, school, and classroom climate (Brown, Anfara and Roney, 2004). The school leader is considered one of the most powerful factors influencing the development of the quality and nature of a school (Cohen et al, 2009). A transformational leader who lays down goals and purposes, provides a clear objective, and stimulates commitment. Consequently, a principal that demonstrates understanding the need to empower, reinforces motivation and commitment towards the objectives of school (Sergiovanni, 2007). Transformational leadership style has an impact on teachers' ideas of the school and their commitment to change, as well as student achievements (Bird et al, 2009; Hallinger and Heck, 1988), thus, they inspired high performing schools. The fact that many of the school's elementary organizational structures are regulated and highly affected by the principal, evaluating the effect of individual leaders on the school's climate and students' accomplishment levels, has evolved into a leading area of research (Allen, Grigsby and Peters, 2015; Cohen et al., 2009; Frieberg and Stein, 1999; McGuigan and Hoy, 2006).

### **4. Transactional Leadership**

Transactional leadership, also known as managerial leadership, is based on reward and punishment (Burns, 1978). The organization usually pays employees in exchange for their efforts at work when leaders are allowed to punish their employees if their work does not meet a proper standard. Thus, this type of leadership focuses on the role of oversight, organization, and group performance. Yukl (1999) argued that unlike transformational leadership, which seeks to change the future, leaders who hold the transactional approach tend to preserve things as they are. A school principal acting in a transactional approach, concentrates on integrated goals, curriculum, teaching strategies and assessment. Thus, such principals may use disciplinary measures to bring the students' performance to standards (Douglas, 2012; Hargis et al., 2011), such as, suspension from school (Odumeru and Ifeanyi, 2013). Thus, the question arises, what is the impact of transactional school principals on the motivation of their students to pursue academic achievement.

## **5 Research in Israel**

### **Study Sample**

The sample of the study consisted of 40 High school principals from the Arab/Druze and the Jewish sectors; 324 English teachers; 212 Parents. All participants were recruited from the same schools in order to understand how these populations are inter-related. Data were gathered from 40 high schools in Israel.

### **Results**

The findings showed that Jewish teachers report higher principal involvement in comparison to Arab teachers. Moreover, Jewish principals attributed higher importance to the quality of teachers in comparison with Arab principals. Jewish parents report fewer student problems in comparison to Arab parents. The overall motivation of the students in the study (as reported by their parents) to learn English has a positive correlation to transformational leadership style and a negative correlation to transactional leadership style. In addition, the students' satisfaction from English classes had positive correlation with principal's involvement ( $\beta = .15$ ,  $p = .03$ ). Further, the findings show that scores in English matriculation have positive correlation with principal's involvement and school management's close supervision. In addition, transformational leadership was found to be positively correlated with English score, while high transformational leadership is associated with high English scores in total sample for Jewish and Arabs.

## **6 Conclusions**

Our research has shown that although school leadership is significant, no less important is school management. A good principal is both a leader and a manager. There is a very significant impact on the school principal's management style on the English matriculation scores of the students in our study. The leadership style that has contributed to the highest level of scores is a transformative leadership style that is not based on reward and punishment, such as the transactional style, but rather on empowerment. It is evident that there is a difference in English matriculation scores between the Jewish sector and the Arab sector when Jewish students achieved higher results than Arab students. Our study found that Jewish principals attribute higher level of importance to the quality of teachers and they demonstrated higher level of involvement in the school. Therefore, a strong emphasis should be placed on the involvement of the school principal, not only as an empowering leader, but also as a manager, both in the Arab and in the Jewish sectors.

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## EDUCATION, ENTREPRENEURSHIP AND INNOVATION. AN OVERVIEW

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**Abstract.** Innovation and entrepreneurship have a significant impact for education, since the latter is highly flexible and capable of adapting to various social and economic contexts and developments. Despite the flexibility inherent to education, there are various factors that hinder both innovation and its implementation. Two of the most important factors are the teachers and the students, followed by the political and social contexts. Despite the barriers, innovation and entrepreneurship manage to create the proper means for innovation and the results are visible. The issue is the scale of educational innovation and entrepreneurship, which would create a tipping point in the larger educational system, to create a new status quo, that allows innovation to be part of the everyday process of teaching and learning. The article aims at offering an overview of innovation, entrepreneurship, and education, what they are and what barriers they encounter, and the practical ways in which they are developed to further education and various social, political, and economic contexts.

**Keywords:** entrepreneurship, education, innovation, development, barriers

**JEL classification:** O310, A230, A210

### 1. Introduction

Innovation in entrepreneurial education is a concept that needs a detailed approach. The concept is explained in the Canberra Manual (OECD & Statistical Office of the European Communities, 1995) as the implementation of new or significantly improved product or process, or even a new organizational method, in our case, in the educational practices. Entrepreneurship and innovation are important for the educational system because it aims at preparing students for the challenges of the social and economic contexts. In this sense, the article proposes an overview of the importance of innovation and entrepreneurship in education.

### 2. Means of innovation in education

Within the narrower context of higher education, innovation is reflected in various ways. For example, competency-based learning is among the most important innovations, because it goes beyond traditional teaching, where information is transferred to students, into process learning, which makes it more student centered and efficient. It is also a means through which innovation in any field can be introduced, as for instance in entrepreneurial education (Yan & Guan, 2019). From a technological perspective, video streaming, flipped classroom and e-learning methods are innovative, but they pose a threat for the established university/college structures, because of high-quality content readily available on various platforms. Despite the availability, the educational system manages to remain unchanged. This aspect is connected to the issue of open curriculum and MOOC (Massive Open Online Courses) (Cachay-Huamán & Ramírez-Hernández, 2019), which seem to be held back by assessment, feedback, and certification issues. A significant mean of innovation resides in the very nature of education's flexibility, translated into the changing nature of faculty, which refers to specialized teachers that are able to teach online in rural or remote regions, while having tenure or collaborate with prestigious

higher education institutions. The benefits outweigh the dangers, since high-quality teachers, especially experts in various fields, can make the difference between staying in school and abandoning education altogether. Another factor that might influence innovation is changing the revenue sources of institution funding, especially in the global context of economic recessions and pandemics. Reducing costs, shift revenues, aim at new ways of funding education (14 Examples Of Innovation In Higher Education, 2020).

### **3. Proper innovations in education**

Innovation in the proper sense of the word, encompasses digital/interactive textbooks, because they offer the possibility for the student to engage visual representations, independent of the teachers' explanations, and linked information (via internet access) on a single device, to be readily available and used. Two other innovations, connected to textbooks are 3D printing, especially in the field of technology and engineering, and virtual and augmented reality, that maybe applied to entrepreneurial education, but in a rather limited manner. Artificial intelligence (Gao et al., 2021) aims at offering, among other things, adaptive software, targeted improvement, tutorial support, information interaction, trial-error learning, and even changing teacher roles and changing the nature of learning itself (10 Roles For Artificial Intelligence In Education, 2016). The last two innovations that are applicable to education are new kinds or degrees and certifications and new pedagogies, both aiming at adapting to economic, social, political, and cultural realities. The means through which they innovate are, for example nano-degrees, certification updates, and a practical change of lectures, by implementing project-based and inquiry-based learning (14 Examples Of Innovation In Higher Education, 2020), and design-thinking (Gleason & Jaramillo Cherez, 2021).

### **4. Barriers in education innovation**

Innovation may be seen as useful and desirable, but it seems that the most notable barriers are represented by teachers and students, since they are the ones facing, experimenting, and working through it. The issue is connected to correct evaluation of the innovation by the two groups (Schophuizen & Kalz, 2020), together with stakeholders, before the innovation is implemented. Students and teachers are part of the wider structures of the educational system, which are mainly traditional. Even though innovation is an element of higher education, some institutions within the system are slower to implementing it. Adopting innovation is coupled with issues of complexity and labor-intensive procedures. Innovation disrupts usual routines; therefore, it is treated with little to no tolerance by both staff and school management. The political and economic dynamics of the educational system are reluctant towards innovation, partly because they require funding that is not always readily available. Depending on who benefits from implementing innovation, may fuel disputes, confusion, and disparities, that slow or even halt the process of implementing innovation (de Queiroz Machado et al., 2021). Outside the school system, policymakers may create confusing methodologies and budget issues that further hinder the process. In the context of education, R&D (research and development) that is lacking proper funding results in disconnection between education's various practices and components, leading to less or even no innovation at all. The educational system is thus lacking interest and proper funding from the government, but it also lacks interest, and even high levels of resistance from the school management and teachers alike (Syariff M Fuad et al., 2021).

## **5. Innovation and entrepreneurship in education**

Returning to the concept of “innovation”, it is pointed out that the innovation depends on interaction and feedback, and on a learning process, based on problem-solving process. Thus, innovation and implementation are strongly dependent on one another. Innovation may be related to something “new”, but at times it uses already created means to solve new problems. Innovation does not discard what already exists, but adapts it to new issues and problems, in order to further knowledge. However, the starting point of innovation lies in identifying a problem, working on an idea, and develops towards a solution. Innovation applied to the social field, which is closer to the theoretical approach of entrepreneurship, leads to effective and sustainable solutions for various social problems, from various points of view, including economic ones. Education and innovation are connected into a process of teaching and learning, because education is not limited to developing competences, but to improve learning outcomes. Educational innovation needs to be effective, efficient, transferable beyond the institutional context and long lasting. It also needs to be synergistic in creating the “new” and the implementation process. The purpose, in general terms, is to improve the educational process altogether. Education innovation therefore relies on critical thinking, a change in the interaction between teacher and student, that build educational working communities. Achieving and sustaining innovation, a teacher must be able to design and develop curricula (McClure, 2015), initiate and think in term of learning innovation, properly and efficiently evaluate competences, and be part of a learning community, together with developing entrepreneurial competences (Arruti & Paños Castro, 2021).

As for entrepreneurship, it is connected to the economic field, but it aims at developing new production processes and products, but also new markets, new resources or services, among others. Entrepreneurial innovation also aims at developing new organizations and the creation of activities that result in employment. Entrepreneurship stimulates sustainable social transformation, but it also aims at satisfying social needs and demands. Problems solving is part of the entrepreneurial mind frame and its objective is to address the wellbeing of society. In this context, entrepreneurship relies on initiatives from the field of business and companies. Social value is created by social agents, while social entrepreneurship aims at genuine social change, change only occurs by mobilizing ideas, abilities, resources, and agreements, by employing innovative proposals. Just as education is flexible in adapting to new social and economic contexts, entrepreneurship can do the same. In this new context, entrepreneurship, applied to education, seems to have a wider application than business-related contexts. Entrepreneurship is to be taught in various stages of the schooling system, both K-12 and college levels. Innovation in entrepreneurial education is based not on the transfer of information from teacher to student, as in the traditional educational model, but in new ways and through new methods, that adapt the concept to various stages of student psychological development. The issue is highly complex, because entrepreneurship in education develops the competences that students and citizens need in order to adapt to the challenges of globalization, and contemporary social and economic demands. Entrepreneurship is, therefore, connected to issues of employability, active citizenship, and entrepreneurial skills, that students and graduates alike actively use in their daily lives (Arruti & Paños Castro, 2021).

## **6. Conclusions**

Entrepreneurship and innovation are either different or at least similar. Depending on how one defines “entrepreneurship” it can be limited to economic/financial/business

matters, or it can be extended to refer to active citizenship, social competences, and the ability to face the challenges of contemporary global and local contexts. Innovation and entrepreneurship are used to define actions related to active methodologies that shed a new light on the educational system, the layout of the classroom, schedules, organization methods, cooperative, blended, flipped learning, but also when various technologies were used. In the larger context, entrepreneurship in education also refers to the multitude of initiatives that lead to educational-based businesses or projects, such as schools, education institutions, conferences, educational software companies, specialized consultant companies, followed by MOOC's, the design of the curricula, oriented towards entrepreneurial competences. It implies that entrepreneurial education focuses on long lasting effects and developments, that genuinely transforms the educational organizations. The process encompasses organizational approaches and educational plans, that enrich the teaching/learning process and its outcomes (Arruti & Paños Castro, 2021).

Entrepreneurship is not about starting and conducting a successful business, but it is rather about a person who aims at solving education issues and objectives, through the development of entrepreneurial competences. The process would genuinely focus on educational objectives and social issues, that may be addressed and solved through the development of entrepreneurial competences. The pedagogical innovations and the social challenges would be addressed through the teaching/learning process, in which both teachers and students prepare to engage issues beyond the classroom. The issue remains in the hands of policy makers, who develop the educational policies that facilitate the training of educational professionals in entrepreneurship and innovation skills. Not only would this approach need a constant review of long-lasting curricular contents, that need to be reviewed, transformed, and adapted to various economic, political, cultural, and social contexts.

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## A BRIEF ANALYSIS OF THE DIGITAL LEADERSHIP AND ITS DIMENSION

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**Abstract:** *The article proposes a brief conceptual analysis of leadership in the digital context competitiveness in all services and goods markets focusing on the premises conducive to the development of this phenomenon, from a microeconomic perspective. Also, the paper is based on highlighting the importance of this digital leadership exploring the transition from traditional to digital leadership and the new dimension thus constituted.*

**Keywords:** leadership, digital leadership, digitization process, Industry 4.0, Industry 5.0, digital transformation

**JEL classification:** D23, M1, M15, O3, O33

### 1. Introduction

According to Harary (2017) humanity has gone through four phases of development - a process that began about 13.5 billion years ago (the Cognitive Revolution) until now (the Scientific Revolution). Between the two we find the Agricultural Revolution and the development of so-called imagined orders - the first forms of leadership. They arose as a result of the establishment of very prosperous communities, and the need to implement an organizational structure in order to ensure their proper functioning. One such example is that offered by the Code of Hammurabi which invested the king as "the chosen, supreme leader" (this title resonates with the authoritarian style of leadership). The turning point in the development of digital leadership began in 1945. It marked the Scientific Revolution following the launch of the first atomic bomb in Mexico (Harary (2017)). The digitization process had as a starting point the establishment of computers by Vanner Bush in 1931 and materialized with the advent of the Internet in 1990 (Issacson 2015). All these innovative changes have led to new structures in business models, shaping the notion of digital leadership. I believe that it is based on the principles of the traditional one, this point of view being supported by other specialists. - for example, Wart et al. (2019).

### 2. Objectives of the article and research methodology

The general objective of the paper is to identify the transition from traditional leadership to the digital dimension and the importance it has on the success of an organization. Also, the identification of the two support pillars and their description: Industry 4.0. and 5.0. These objectives are to be developed later in the doctoral thesis. The research methodology was based on the following research questions: What is digital leadership ?; What is the digitization process ?; It involved: the study of Romanian and international specialized literature (books, articles, studies, publications, etc.); content analysis of the specialized reports published by the bodies in the field.

### **3. Industry 4.0 and 5.0-two basic pillars of leadership in the context of digitalization**

Industry 4.0 is only a natural continuation of the digitization process started in 1931 and 1990, respectively with the advent of the Internet. It is the fourth step in the Industrial Revolution and emphasizes the need to digitize production (Bach and Sulíková, 2011). According to Oberer and Erkollar (2018) the key to this stage is the transparency of the two levels - virtual and physical but also a permanent communication between people, machines and other technologies / devices - thus, we are talking about real interconnected networks. It operates with "four key elements" that are found in the classical dimension - innovation, collaboration, interconnected operation, vision (Mihardjo et al. 2019). Industry 5.0 is an extension of the other, putting in the middle of the digitalization process the human resource aiming at a sustainable increase in the quality of life and the establishment of an intelligent society. It is based on promoting innovation and providing a bridge between society and technology (Pereira, Lima and Santos, 2020). In the view of Bhandurge and Bhide (2021) the tasks of robots and humans were well demarcated, while in the level encourages the elimination of this barrier - human cognitive skills are complemented by robotic assistance " (Bhandurge and Bhide (2021). Thus leadership plays a role crucial in restructuring processes and ensuring their efficiency, in order to increase performance (Kasapoğlu 2018).

### **4. The new dimension and its main pillars**

According to studies by Miller C. (2018) digital leadership is the tool through which technologies are widely used to Increasing the quality of life, the well-being of people. Digital leadership means ensuring the strategic success of digitalisation in a company, rethinking business systems, restructuring rigid mentalities, new skills and jobs (Yücebalkan, 2018). On the other hand, traditional leadership, in Ziglar's (2001) view is that ability to lead others and teach them to jump over obstacles by paving the way. The dimension of traditional leadership according to the Institute of Leadership and Management (2021) aims at 5 steps. These include the vision, originality, ownership, cooperation and achievements made. This approach is based on the large number of theories and models of leadership (Lefter, 2012). Of these, we refer to the general ones (personological, behavioral, primary, situational, cognitive, etc. theories) and leadership models. It folds either on the situation, or on the leader, or on a mixture of the two (Vroom and Jago, 2007). According to specialists, there are 6 factors (the first 5 are internal and the last is external) that can determine the size of the new leadership format. The first is the degree of interconnectivity (Khan, 2016) new trends for high performance and sustainable development. The second leads to easier decision-making due to the digitization process. The third focuses on minimizing the information gap and its abundance. The fourth feature talks about the need for transparency in action. The fifth component is the elimination of hierarchies and the dissolution of the removal of personal barriers between those in charge and subordinates. The latter is named by Westerman et al. (2014) as a reversal of programs, leadership not only from the top down, but also from the bottom up. The last feature highlights the networks established at national and international level between organizations, markets, consumers, states, etc. - ie breaking the barriers of time, space, place, culture due to the evolution of technology. The digital dimension of leadership is based on an essential condition - the integration of specific tools in the form of an organizational set. It includes: various digital platforms, social networks, artificial intelligence, internet, databases, etc. (Cortelazzo, 2019). It also extends its influence

and importance not only to the microeconomic level of organizations, but also to the macroeconomic level in order to contribute to economic growth. Research in the field has shown that "digital transformation" produces changes in the 4 component dimensions of an enterprise: the use of technologies, the value creation process, the business structure and the financial aspects (Kazim, 2019, p.24). This dimension is adjusted in the process of digital transformation of an organization - it can ensure its success or failure. The leader plays a vital role but also the chosen leadership style. The central position held by the leader is also supported by a study undertaken by Deloitte and Sloan Management in 2014 - they applied a survey of 4,800 leaders and managers to determine the relationship between opportunities noted and those fruitful by the leader in the new context. The top leader is the one who promotes change and supports it (Sainger, 2018, p. 1-2). An example of success in applying digital leadership is that offered by Tesla, through electric vehicles - Elon Musk understanding that innovation and risk-taking is a key part of success, especially in this highly competitive industry (Araujo, 2021, p.1 50 -52). An example of failure is that of those at Kodack who failed to change the way they operate and constitute a digital vision (Frankiewicz and Premuzic, 2019).

## 5. Conclusions

Therefore, the importance of this type of leadership is crucial, because the effects it produces are not at the level of a single economic agent, but also contribute to the identification of the level of competitiveness of a country - the macroeconomic perspective. In this regard there are a number of indicators that can be used: Digital Economy and Society Index (DESI); cybersecurity (ENISA), etc. (Cahyana and Magda, 2021). This article is a starting point for identifying the role that digital leadership has on organizational performance and identifying new leadership models of digital transformation.

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## LEADERSHIP – THE ART TO BEING HUMAN

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### **Abstract:**

*Nowadays, the global pandemic caused by the new coronavirus, COVID 19, has disrupted the lives of most people on the planet. The new leadership model is based on the technology, access to information through the Internet, transition to creative-innovative economy, based by sharing economy. During this difficult period, the role of the leader has undergone changes, in the sense that now more than ever it, he must highlight the human role in the leadership style. The new model of leadership must take in consideration the impact of global crisis on the soul of people, the impact of the digital-oriented skills and resources that are necessary in a digital economy. To be a human leader capable of promoting a culture of excellence, you need to demonstrate exceptional character and, implicitly the aim of high-level set competencies symbolically names competences heart. The character and authenticity make easiers leaders to promote creativity, innovation and a culture of excellence to exert a beneficial, positive influence on the people with whom they interact with a pure heart, dedication and competence. The ability and skills of modern leaders are particularly evident in difficult times of crisis when they must also demonstrate human competences. The purpose of this study is twofold: 1. to identify how leaders being human can. and 2. examine literature in order to identify and analyses the characteristics human leader. The question of this research is what are the instruments how help us for being human leaders. The research is based by identify some study case, and human solutions.*

**Keywords:** leadership, innovation, creativity

**JEL classification:** I30, A1.

### **1. Introduction**

During the 20th century, the economies of the developed world shifted from industrial, digital to knowledge-based economies. We are now at another turning point, with the transition to human economies. The new leadership model is primarily about the human side, where compassion, empathy and sensitivity to the needs of others must prevail. The modern creative-innovative leader working in the new paradigm of the collaborative economy will have to prove that he cares not only for himself but also for his fellow human beings with whom he can be happier and more fulfilled. To be human is a shared knowledge: it implies a feeling of belonging to a group whose members strengthen their cohesion by recognizing each other through a common relationship. There are many effects that influenced the human character. The first is about the way things are changing globally the global crisis. And the lifespan has shortened

considerably, but the substance has also changed. The question that arises is what is the mindset and values of a leader. A lack of ideals and a lack of consistency in doing things that matter, that are valuable, that go deeper can have disastrous results on people. The crisis opens up a place for human entrepreneurship that can be applied in practice (benefit corporation) where the leader and the management embody the values of solidarity, empathy, equity and fairness. Responsible business conduct can alleviate the crisis effects and enhance virtuous behaviors toward both employee and customers (smart working for employees, relationship with customers). The human leadership relation can support the community that he is part of. An example can be supporting sustainability projects for the communities, donations for hospital, the provision of essential medical suppliers.

**2. Add purpose to your business**

The crisis has generated the opportunity to (re) think about the economy and society as a whole (Barbier and Burgess, 2020). All the things, we were used to do, have taken a different dimensions. Now more than ever is important to defining human leaders like promoters of the sustainable organization. Now, the development of organizations is more horizontal than vertical. The question is why people would do the “right” thing when social pressures are to the contrary. In other words, it is important to see how and why some people are human leaders in morally challenging and complex social environments. Peter Drucker, the father of management thinking, says that " Management is about doing things right; leadership is about doing the right things." We need to deeply internalize this fundamental distinction and integrate it into our human operating systems. The human leaders are forced on the innovation, digitalization, sustainability and flexibility. That means flexible hours, job sharing, agile work, etc. The leadership creates a culture encompassing values capable of generation innovation, appropriate risk-taking and decisive action. This also means that new skills and competences should be developed by the people and continuous learning may be necessary for everyone.

The human leadership does not simply emerge from a code of conduct, a good school, or a host of good intentions. It is an individual choice, or rather a series of choices, that emerges from the complex interaction of personal values with social imperatives. The secret of a solid and honest leadership is increasingly based on the human relations between the members of the organization. In fact, initiating a positive and close relationship with people has an impact on the efficiency of companies, as it generates well-being and encourages the employee’s sense of commitment. The best way to enhance performance is to build empathy with the people. It’s not about pretending to be close, but about recognizing that a company’s achievements and ideas depend on the whole team, not just the leader. Success belongs to everyone; therefore, a human leader must work to make his employees feel valued in the organization. The human leader wants above all to be a partner of the society in which he lives. Human leadership also means being accessible when is necessary: this proximity generates a unique relation between the members of the company because they feel that the organization considers them as its greatest asset.

How to promote/develop a "human" leadership

**Table 1:** Actions and results for promoting a “human” leadership

Actions	Results
Take care of your team's well-being	a good working environment
Clearly communicate goals and priorities	communicate transparently

Making progress in the right direction.	increase your efficiency
Delegate and be flexible	teamwork and delegating tasks, create and maintain healthy relationships
Build trusting relationships with its employees.	Integrity, honesty
Know how to talk and listen	encourage dialogue.
Have a clear vision and know where wants and needs to go	visionary leader communicates clearly
Puts himself at the service of his employees and the company	humility
Motivate employees and guide them in order to develop them	passion
The enthusiasm of the leader and his faith in his collaborators increase the chances of success and the results of the collaborators.	enthusiasm

Source: author's research

The human leaders practice what they preach and are mindful of their actions. They know that everyone is watching them and therefore are incredibly intuitive about detecting those who are observing their every move, waiting to detect a performance shortfall. (Glenn Llopis, 2013). And fundamentally, humans are loving beings who seek to love and be loved, to contribute and serve, to be useful. For many, work has become a source of stress and suffering. It is a great necessity to have more humanity in our companies. Employees are asking to work in environments where they can grow and work on something that is meaningful to them. The goal is to put the human being (human in the broadest sense) back at the center of attention. To allow them to BE. To be, globally: physically, emotionally, "relationally". The human leader understands that the best deals are those where everyone wins. A person who understands the importance of success not only professionally, but also personally. (Nicolas Duvernois, 2016). The best deals were those where everyone was a winner, which reflects the spirit of the human leadership. In the human economy, it is the hearts that are hired. The employees will continue to bring to their work certain traits that cannot and will not be programmed into software, such as creativity, passion, temperament, and collaborative spirit. In other words, their humanity. The ability to leverage these assets will then determine the superiority of one company over another. (Dov Seidman, 2016)

How we can introduce humanity into our business, into our work environments. It's simple, there are three pillars. (Pascale Dufresne, Conseil Formation Coaching) 1. Creating trusting environments! When people feel safe, they do not spend their energy protecting themselves, but rather building positively. When people feel trusted, they are loyal, they innovate, they trust, they cooperate, they contribute. Creating trusting environments is the key. How can we do this? Listening, create a culture where mistakes are allowed, do things and make decisions for the common good, not for personal gains. 2. Share your vision, give meaning! Objectives are important, of course. But what really motivates is the meaning. People want to know what they are contributing to. Why we do what we do. It is very important to create in the hearts of your employees the desire to serve your mission. 3. Be courageous! The human leader takes risks, challenge the status quo, and express his vision through his actions.



### 3. Proof of humanity- study

Look an example given by Dorin Bodea (Dorin, 2018) CEO of Result Development: I can't take a CEO saying to me "I've been asked to cut 15% of posts and that's what I have to do"...because your role there is to think. You can't be so opaque and fire three or ten workers and not a manager, for example, just because the manager is your friend or is in your team.

According to the study entitled "Only human: The Emotional Logic of Business Decisions", a majority of executives insist that "human perception must precede sharp analytical skills".

### 4. Emotion beats data in B2B decision making: study

There are organizations there are trying to differentiate themselves from each other by claiming to be "human" (Chevron is the "Human Energy" company and Cisco is the "Human Network").

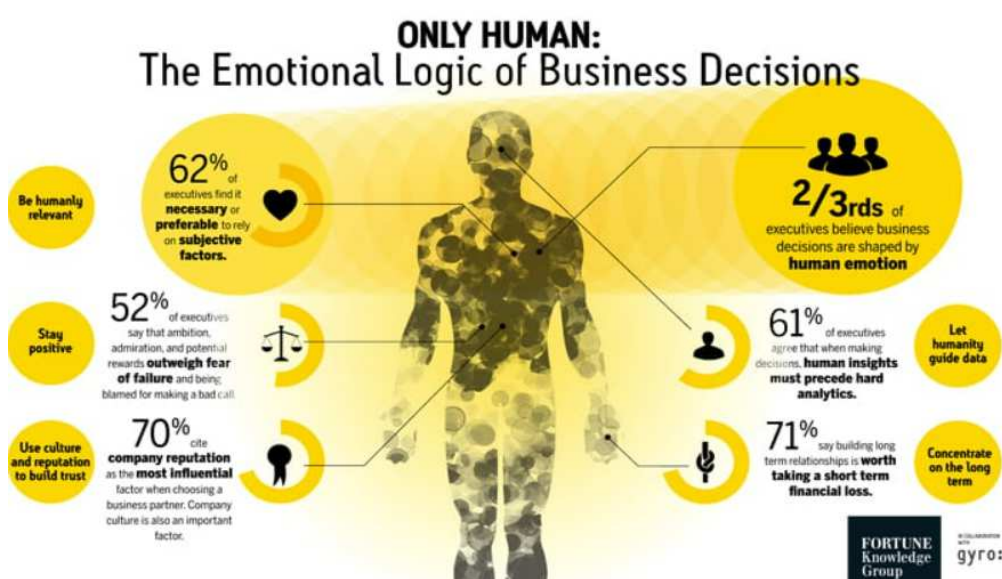


Figure 1: The Emotional logic of business decisions

Source: <https://www.hbrfrance.fr/>

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## CULTURAL TOURISM - CAN IT CONTRIBUTE TO THE LOCAL DEVELOPMENT?

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### **Abstract:**

*Cultural tourism is one of the forms of economic development at the local level, which is based on cultural resources. Due to the accessibility and the increase of the mobility, lately this type of tourism has known an increase. Cultural heritage represents an important potential for international tourist flows. This type of tourism can contain various activities, such as visiting museums, participating in festivals, events, tasting drinks and local food. Besides the local development, this form of tourism also contributes to the understanding and knowledge of the environment and the history of the places. It is an instrument of cultural, emotional, spiritual and intellectual enrichment. Cultural tourism brings both positive benefits to society and negative benefits. The European Union, through the European Commission, contributes directly to the development of various programs.*

**Keywords:** cultural tourism, local development

**JEL classification:** O29

### **1. Introduction**

Educational tourism is important from several points of view, including the social impact it has. Cultural tourism has a positive impact from an economic point of view, because tourists who visit a region to discover local tourist attractions, contribute positively to the development of the local economy. Tourist attractions need human resources, which bring different employment prospects, and the same happens at various companies, accommodation or restaurants.

Due to the growth of cultural tourism since 1980, cultural heritage is considered an important factor that helps increase the competitiveness and attractiveness of destinations (OECD, 2009). Despite the fact that national and international public institutions highlight the direct relationship between cultural heritage and tourist attractiveness, the empirical evidence is limited. The empirical findings that support the existence of this relationship are important for debates on the economic role as a resource for local development (European Commission, 2015).

About 40% of tourists decide to make a trip due to the cultural offer of the destination (World Tourism Organization, 2018). Although UNWTO and OECD have reported increases in cultural tourism, international statistics do not distinguish between cultural tourism and leisure tourism and it is not known whether culture is the main motivation for a trip or is only a secondary activity (Noonan and Rizzo, 2017). Cultural tourism refers to tourists who consume culture, such as museums, monuments, theatres, gastronomic experiences, shows and cultural events.

## **2. Brief Literature Review**

Cultural tourism is defined as the mobility of people to meet their human need for diversity, desire to increase their individual cultural level. The relationship between cultural heritage and tourism is an important topic that has been widely debated in the literature. On the one hand, there are studies that have analyzed the important factors of tourists for choosing destinations, by analyzing microdata related to economic and social conditions (Park, Woo, & Nicolau, 2019). On the other hand, there are studies that have analyzed the determinants of tourism demand and the attempt to model and forecast, based on data on tourist destinations (Faber & Gaubert, 2019). Moreover, there are studies that have combined both situations, the determinants of tourism demand represented by the specific characteristics of the place, the personal characteristics of tourists and the determinants of supply, representatives of tourist participation (Bernini, Cracolici, & Nijkamp, 2017). The attractiveness and competitiveness of destinations were assessed, in terms of the presence of cultural or historical sites (Bernini, Cerqua, & Pellegrini, 2020).

The rapid growth of tourism can create certain pressures on the environment, infrastructure and the local community. If this increase is uncontrolled, it can lead to a negative impact on cultural heritage as well as on residents, leading to resentment towards tourists (OECD, 2020). Since 1970, problems related to overtourism and the increase in the number of tourists in a spatial and thermal concentration have been identified (Pasquinelli and Trunfio, 2020). Tourist behavior affects the quality of the destination at a fast pace. If the risks of over-tourism are neglected, a vicious circle can be reached, especially in the case of cultural tourism. To ensure the sustainability of tourism, several indices have been proposed, strengthening partnerships and sustainable policies, supporting evidence-based decision-making, improving infrastructure and marketing alternative tourism products (OECD, 2020).

## **3. Results and discussions**

Cultural tourism is an important branch of tourism for many reasons. The most important reason is the social impact that cultural tourism brings to the local community. This type of tourism is beneficial for consolidating identities, as well as for preserving heritage and improving intercultural understanding.

The European Union recognizes the importance of culture as an element that contributes to raising the profile of Europe as a global destination. The European Commission supports the areas of cultural tourism that have the greatest growth potential. European regions are important destinations due to culture and cultural heritage that include historic cities, theaters, museums, industrial styles. The European Union is directly involved through the European Commission in the development of cultural tourism through funding for the implementation of various programs.

### **3.1 The negative social impact of tourism**

Regarding the negative social impact of tourism, there are tourist-host relations, social change, globalization and destruction of conservation and heritage, marketing and standardization, loss of authenticity. Social change refers to the way society behaves. There are unpleasant changes that occur due to tourism. Globalization is the way the world becomes interconnected and because of this, individuality is lost. This phenomenon is inevitable in the tourism industry, due to the interaction between tourists and hosts, who come from different social, cultural and geographical backgrounds. Globalization also means the loss of authenticity resulting from tourism. The western world considers that a tourist destination is more authentic if it keeps its

culture and traditions unchanged. Certain measures are already seen in the local administration of some locations with a high number of attractive cultural destinations, like Venice, Italy, where the local authorities have introduced a tourist tax for day visitors. Such measures are targeting the control of over tourism and potential negative impact upon such destinations, at risk of degradation.

### **3.2 The positive social impact of tourism**

From the point of view of the social impact that tourism has, there are strengthening communities, revitalization of culture and art, preserving local culture, preservation of heritage, strengthening communities. Tourism is an interactive service, and the interaction between a host and a guest is inevitable. This can have a significant cultural and social impact. Many destinations want to protect and preserve the local culture. This is beneficial for the sustainable management of local heritage and natural resources. Tourism can also be seen as a catalyst for strengthening local communities. The festivals and events in which the local inhabitants participate, represent a response to the tourist interest regarding the local development.

### **4. Conclusions**

This paper aims to present one of the aspects of tourism, namely cultural tourism and the role it has in local development. Cultural tourism has many positive aspects and contributes significantly to the development of local communities, even nationally. These issues need to be known by economic policy makers and encouraged through various state aid programs or schemes, in order to multiply the positive effects. There are also negative effects arising from this time of tourism. These effects must be diminished. This type of tourism has faced in the last two years imposed many problems, caused by traffic restrictions of the authorities to protect the health of human resources.

### **5. Acknowledgements**

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## EDUCATION OF HUMAN CAPITAL, AND COMPETITIVENESS IN THE „NEW NORMAL”

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**Abstract:** *Educated individuals turn a state into a rich country. Education, regardless of the changes taking place in the world, remains a priority and an effective tool in the hands of human resources for competitiveness. Because online platform courses have more permissive rules, the participation rate is high. Universities famous for transmitting knowledge globally have built a collaboration with online platforms. Lifelong learning is the way to a successful life. "The appetite" for education must be opened from an early age because the economy of the 21st century requires individuals with a solid education. The transfer of knowledge between universities and the business world was also done with the help of online platforms.*

**Keywords:** human capital; competitiveness; education; economic growth

**JEL classification:** I20; I23; J24

### 1. Introduction

The covid-19 pandemic has shown the ability of individuals to use knowledge effectively and to adapt their skills to changes in the economic and social environment. The importance of investments in human capital was debated by economists of the twentieth century. But since some states, posterior investing heavily in human capital have not achieved the desired progress and competitiveness slowly the focus was directed to other factors such as technical progress or legislation. We must not forget that in an unstable economic context, human capital becomes the first engine of economic development. The true importance of human capital can be seen in close connection with that of education. Over time, education has undergone many changes, and today more than ever higher education makes a difference. The competitiveness of a nation depends on the level of education of the population. Famous economists like Adam Smith, J.S. Mill, A. Marshall, G. Stigler, G. Becker showed the link between a thorough education and the competitiveness of the country (Badea, 2012).

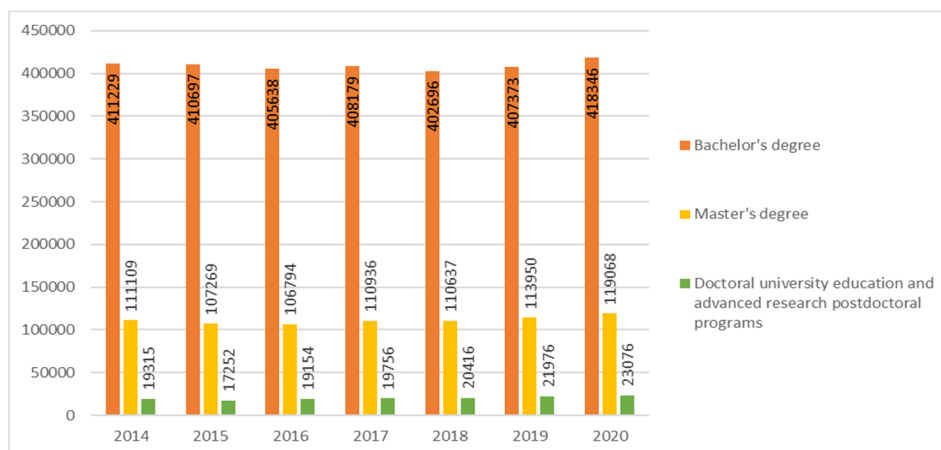
### 2. Methods

The research in this article is a quantitative type. This involves the study of national and international specialized literature, statistical data, as well as an analysis conducted by international organizations about education. The increasing participation of people in online education furnished by online platforms demonstrates that they start to understand and give more importance to this field because they seem like a solution to mitigating the consequences of the pandemic. A strong argument for participating in online platform courses is to provide a different perspective by facilitating the exchange of information globally.

### 3. The education of the human capital

A thorough and competitive education already begins in primary school. In Romania primary education including special education in 2014 registered 947.205 participants (48% - 52% in favour of boys), and by 2020 this number decreased to 876.906. The trend is not increasing even in the case of lower secondary education (including special education), their number in 2014 being 785.100, gradually decreasing to reach 712.526 in 2020. The year 2014 for secondary education meant 774.703 enrolled, but their number gradually decreases to 702.754 by 2020. In six years, high school education has lost over 100.000 participants, and this fact shows us that Romanian education fails to gain the trust of young people.

In 2014, the school population from pre-school education to doctoral university education and advanced postdoctoral research programs trained 3.735.552 people. Within six years this number drops to 3.494.604. The number of students enrolled in university education (bachelor's, master's, postgraduate courses, doctorate, and advanced research postdoctoral programs) shows that between 2014 - 2020 there was an increase of 18.837 enrolments as we can see in figure 1.

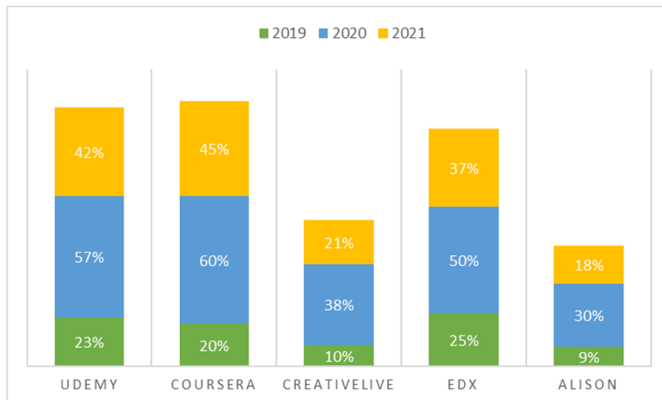


**Figure 1:** Participants number at higher education levels

Source: created by the author, based on information collected from Eurostat

Despite attempts to convince the Romanian population that higher education in Romania is the road to well-being, many choose to work and gain experience in this way. A part of the population that has sufficient financial resources chooses a university outside the country. While full-time education in 2014 was chosen by 494.584 students, in 2020 some 510.062 students choose this option in digital format due to the restrictions brought by covid-19. The "new normal" brought by the restrictions is common for those who chose distance education as a form of education before 2020. Specifically in 2014 their number was 46.925, 2015 (42.808), 2016 (42.066), 2017 (45.402), 2018 (45.148), 2019 (47.105) and 50.428 in 2020. Gradually, distance education began to gain ground as people recognized the benefits it offered. The possibility to benefit at moderate costs from the experience and knowledge of some tops, to obtain the much-desired diploma or simply to build long-term beneficial professional relationships is among the reasons for students who have chosen those specializations. Online platform courses in 2020 and 2021 have contributed to the development of the knowledge of over 80 million people. Online platforms like Udemy,

Coursera, CreativeLive, edX, Alison have taken full advantage of this period, improving their educational offer daily (coursera.org). Course success is expressed as a percentage as we can see in figure 2.



**Figure 2:** Number of participants in the courses of Udemy, Coursera, CreativeLive, edX, Alison platforms expressed in percentage  
 Source: created by the author, based on information collected from Udemy, Coursera, CreativeLive, edX, Alison platforms

Many companies trusted these platforms and offered employees free development courses. Among the most popular we can mention those of IT, financial, language and psychology. If in 2019, 30% of those who completed an online platform course did so to keep a job in 2020 this percentage increases to 40% and in 2021 to reach 50%. If the poverty rate in 2019 was 23.8% (22.7% for men and 24.9% for women) this percentage in 2020 increase to 25.2%, and the wages for 2021 place this percentage between 25% - 29 % (insse.ro). Among the major interests of the people during this period was job preservation. Given the challenges that the business world began to face from the end of 2019 to the present day, employees had to adjust to the new normal that brought many challenges. Skills, knowledge, and competencies were reviewed in the light of needs. The new normal comes to ensure the people's rapid response and the efficient adaptation to change.

Out of a desire to retain their students and attract other major universities Harvard, Yale, MIT have a successful collaboration with major universities. Development and social stability were tested by the covid-19 pandemic, and the education system had to face the challenges of winning and not just losing. Suffice it to say that teachers who had to take online courses became familiar with unknown platforms (Zoom, Webex, Google Meet, Lifesize), learned to use programs like Adobe, VDCD, VideoPad, Final Cut Pro. The efficient use of human resources is becoming ever more urgent in Romania.

#### 4. Conclusion

COVID-19 pandemic has shaped our life, in a few months, like no decade before. Education and the importance it plays in competitively training human resources has become vital. The problems that a country faces are easier to deal with if there is an effectively educated human resource base. Education is a very effective means of social inclusion, during dynamic changes, people learned to self-manage their



educational opportunities. Nothing shows this better than the growing number of participants in online courses.

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# DOES DEMOCRACY INFLUENCE ECONOMIC DEVELOPMENT? EVIDENCE FROM POST-COMMUNIST COUNTRIES

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**Abstract:** *This paper analyses the influence of democracy on economic development. It first reviews the main findings of the literature, showing that both positive and negative effects have been found so far, and explaining the causal mechanisms behind them. It then continues with an empirical approach, which implies performing a cross-section OLS regression of per capita GDP on democracy levels at multiple points in time, using a sample of post-communist countries. Empirical results are mixed, in accordance with the literature, showing a positive impact of democracy on development at the beginning of transition, as well as 5 years ago, and a negative impact a decade ago, the latter being possibly manifest on the backdrop of the effects of the financial crisis that increased government expenditure at the expense of physical capital accumulation.*

**Keywords:** democracy; polity V; per capita GDP; economic development; transition countries; cross-section regression

**JEL classification:** P26; O43

## 1. Introduction

Around the date this paper is written and presented, Europe celebrates 32 years since the fall of the Berlin Wall – an event that symbolised the regaining of freedom and democracy in Central and Eastern Europe. In such commemorative moments, we may take stock of the importance of democracy and its influence on a country's economy. Are former communist countries more developed now because they became democracies? To what extent and in what manner does their democratic fibre influence the welfare level of their citizens? The present paper addresses these questions, by reviewing existing literature on this topic and also by implementing an empirical approach.

## 2. Literature Review

While it has been shown that democracy is strongly correlated with growth, literature explored both directions of causality, yet the debate on which way causality runs is still not settled. However, in this paper I will only focus on how democracy influences development, and not the other way around. Most of the channels through which democracy has a positive effect on economic variables are related to one single concept: good governance. In fact, Rodrik (2000) regards democracy as a meta-institution that favours the development of other institutions which, in turn, influence growth.

The same conclusion about the positive effect of democracy on economic growth and development have been reached also by multiple other authors. For instance, among

the most recent papers, Rivera-Batiz (2002) uses a general-equilibrium endogenous growth model to show that democracy significantly influences total factor productivity growth between 1960 and 1990. Jalles (2010) uses a panel dataset of 86 countries over 1960-2005, employing pooled OLS regressions, fixed effects and TSLS estimations, and finding support for the hypothesis that democracy increases per capita GDP growth.

However, other researchers find both positive and negative effects. Barro (1996) uses a sample of 100 countries over a period of 30 years (1960-1990) and finds a nonlinear relationship between democracy (considered as political freedom) and growth, such that the former enhances growth when political freedom is low, yet it depresses it once a moderate level of political freedom has been reached. Tavares and Wacziarg (2001) explain that, on the one hand, democracy encourages economic development by reducing income inequality and enhancing human capital accumulation; however, government financial efforts to help the poor and to expand access to education hurt growth by reducing, on the other hand, physical capital accumulation.

### 3. Empirical Approach

The easiest way to assess the impact of democracy on economic variables is to look at post-communist countries and compare their performance, as these countries simultaneously started to build from scratch democratic systems. While some managed to become genuine democracies after three decades of transition, others remained captive in quasi-authoritarian regimes, the performance of their economies also being considerably heterogeneous. Figure 1 reveals the existence of a correlation between the current development levels of transition countries (measured by their per capita GDP in 2020, expressed in constant 2015 US dollars) and their level of democracy at the beginning of transition (measured by the Polity index value in 1995), showing that democratic countries are, in general, more economically developed.

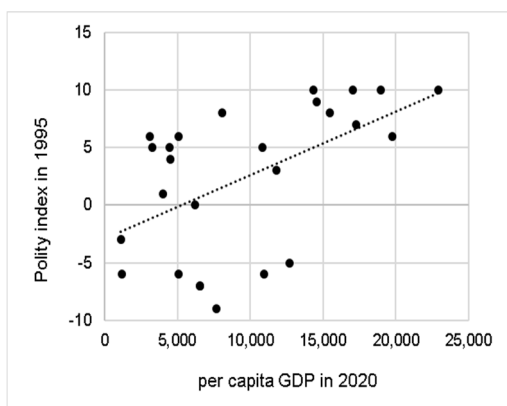


Figure 1: Correlation between democracy and per capita GDP

Note: The Polity index measures the democracy level of a country, ranging from +10 (strongly democratic) to -10 (strongly autocratic).

Source: Polity V dataset, World Bank, author's estimations

In order to investigate the existence of a causal relationship, I perform a simple OLS regression of per capita GDP in 2020 on the Polity index lagged multiple periods, using a cross-section sample of 26 transition economies. The sample includes the following countries: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Czech

Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Montenegro, North Macedonia, Poland, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, and Ukraine. This approach helps me assess how much post-communist countries' current level of economic development is influenced by their democratic path, isolating the impact of different levels of democracy at multiple points in time. Inspired by EBRD (2013), which looks at the opposite causal impact of per capita income on democratization, I choose lag lengths of 5, 10 and 25 years. The regression also includes per capita GDP at the beginning of transition, in order to control for the convergence hypothesis, which states that poorer countries grow faster.

Table 1: Results of a regression of economic development on democracy levels

Dependant variable: Log of per capita GDP in year 2020	
Polity index in 2015	0.323*** (0.071)
Polity index in 2010	-0.368*** (0.069)
Polity index in 1995	0.021* (0.008)
Log of per capita GDP in 1995	0.812*** (0.115)
R <sup>2</sup>	0.932
No. of observations	26

Note: Robust standard errors in parenthesis. \*= $p < 0.05$ ; \*\*= $p < 0.01$ ; \*\*\*= $p < 0.001$ .  
Source: Polity V dataset, World Bank, author's estimations

Table 1 presents the results of this regression. Estimates reveal a significant influence of democracy levels on per capita GDP, yet the direction of the impact is rather mixed: democracy levels 5 and 25 years ago have a positive effect, considerably stronger in recent years compared to the beginning of transition, while the same indicator measured 10 years ago seems to have exerted a negative influence on per capita GDP. Moreover, the effects of democracy 5 and 10 years ago seem to cancel out in terms of magnitude. Results are in accordance with Barro (1996), who also finds that "more democracy enhances growth at low levels of political freedom but depresses growth when a moderate level of freedom has already been attained". While the positive effects have been somehow expected and long explored by the literature, a possible explanation for its negative influence is offered by Tavares and Wacziarg (2001), who argue that democratic institutions tend to diminish the rate of physical capital accumulation, via an increase in government expenditure conducted in order to increase access to education and decrease income inequality. It is possible that the negative effect of democracy in 2010 was accentuated in light of the effects of the financial crisis, as governments were spending even more in order to help their economies recover. Przeworski and Limongi (1993) also explain that a democratic system encourages immediate consumption at the expense of investment, as governments are more incentivised to spend money on their electorate in order to ensure future votes. In turn, voters are also more prone not to support efficiency-enhancing reforms, as such reforms usually do not have immediate benefits, while long-term payoffs are uncertain (Fernandez and Rodrik, 1991). In the aftermath of the financial crisis, such behaviour may be even more accentuated, as governments tend

to resort to reforms that have immediate effects and usually imply higher government spending.

#### **4. Conclusions**

This paper examines the link between democracy and economic development. It reviews the most important findings so far, concluding that no consensus has been reached to date in the literature: while some authors emphasize the positive effect of democracy on growth, others highlight channels through which it exerts a negative impact. It then assesses this link empirically, using a sample of transition countries, which are considered the perfect "laboratory" for such a comparison. Empirical results are in accordance with previous findings in the literature and are also mixed, showing a positive impact of democracy on development at the beginning of transition, as well as 5 years ago, and a negative impact a decade ago, the latter being possibly manifest on the backdrop of the effects of the financial crisis. The paper opens future research avenues in regard to investigating not only the direction of democracy's impact on development, but also its timing, as well as the state of the macroeconomic economic environment and other external events that may influence its direction.

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# IMPORTANCE OF IMPLEMENTING AN ENTERPRISE RISK MANAGEMENT SYSTEM

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**Abstract:** The continuous development of technology creates for companies the need to keep under control all the risks that can negatively affect their entity. Starting from this idea, more and more entities have implemented a risk management system, aiming to maintain a balance against the negative influences that can appear during the life of an enterprise. The present topic represents a field which has not yet been fully explored, national as well as international. Today's economy situation offers us an unpredictable framework, which is why so many managers focus on implementing a proper risk management strategy. This involves the use of different methods of reducing future risks. A good risk management strategy starts a good knowledge of the business environment. Also, it is highly recommended to understand the capabilities of an enterprise. These are the basis for strategic research to identify the most inspiring areas of activity. In conclusion, it is important for an organization to implement a risk management system, as well to identify the challenges that occur in the reporting and assessment stage.

**Keywords:** Risk; Management; Enterprise; Reporting; Assessment

**JEL classification:** M40, D81, G32

## 1. Introduction

Risk management can be interpreted as „the process of identifying vulnerabilities and threats within an enterprise, as well as developing measures to minimize their impact on the information resources of the enterprise.” Identifying a risk in an information system represent the possibility of a loss that can adversely affect information resources and the functioning of an organization's system. Moldovan & Neamțu (2016) mention that risk can be defined “as the possibility of losing”. The losses that they are discussing have both financial and technical nature.

Beasley (2017) notes that each organization faces daily confrontations with risks from various fields, external or internal, such as: operation field, financial, field of human resources, field of quality and field of the environment. The success of an enterprise lies primarily in how the identified risks are addressed and managed.

The relation between the organization's growth policy and the risk management system relies on the fact that both presented aspects complement each other. This suggests that a satisfying risk management process is a fundamental component for an organization. It is important that each adjustment regarding enterprise risk management (ERM) to be suitable with the overall decisions of the company.

The main goal of this article is to highlight how powerful the implementation of a risk management system in an entity is, as well as the theoretical presentation of some challenges in this regard. The research methodology of this paper provides a descriptive analysis of the literature synthesized in the second part of the article.

## **2. Theoretical approach regarding Challenges of implementing an ERM system**

Following the review of the literature, it can be stated that in an uncertain economic situation, risk management practice is the „art of risk management“. The risk management strategy, which is based on progressive changes, focuses on long-term research to reduce risks. A mixture of conducts can be used to improve the efficiency of decisions in practice. Shafa (2020) claims that each strategic threat that might occur in an organization, can vary in near-stable times and crisis. Strategic threats are associated to the future of the organization and mostly related to some issues that are not current yet.

Long & Bloedel (2020) support the fact that organizations have no longer the necessary time to react through developing a strategic response after launching news about an event involving a certain risk. With the publication of a possible risk of an entity, the media will begin a diligent search to discover other possible risks that may adversely affect the organization. Often, a single event is correlated with other risks that have nothing to do with the object of activity of the company, just to tarnish the reputation of that enterprise. The development of a risk management procedure consists of the establishing of a general guideline that takes into account the dynamics of the risk field. The directive must take in consideration and the boost that will ensure the growth and consolidation of the company. Strategic risk mobility is the management instrument that creates and supervise the communication between the enterprise assignment, priorities, future opportunities, and threats. Risk arrangement activities are established without exception by each entity according to main object of activity. The manner of implementing a company's risk policy consists of two stages:

Strategic planning procedure

Strategic management procedure

According to new studies conducted by Beasley, Branson & Hancock (2020) on the emergence of new risks or changes of the already identified risks, alert mechanisms will be established for higher management levels, so that these changes can be addressed in the most accurate way. The results of the revisions are completed in the "Risk Register". This aspect is achieved by taking over the information from the implementation of control and risk monitoring measures plan. All documents regarding the risks must be properly filed, so that when an assessment of the management system is made, they can be easily identified. Also, once the risk register has been completed, it becomes one of the certifying documents which can prove that the organization has adopted a risk management system, and it's working. From this document, any external auditor can start an independent assessment of the risk management process.

The progress of technology in recent years has led to exponential transformation in the audit process and the way it approaches its core activities. This aspect is primarily seen in the process of moving from a control-oriented system approach to a risk-oriented approach, to which an enterprise is exposed. The acceleration of the exchange of information can damage the reputation and brand of an organization with frightening speed. A key issue is that management should focus on fraud prevention and control procedures. According to the international standard ISA 240 „The Auditor's Responsibilities relating to Fraud in an Audit of Financial Statements“ those in charge of governance have the duty to analyze the many possibilities of cheating the control processes or manipulating the financial reporting process and the possibility of cases in which management may intervene by changing revenues to influence the perception of potential investors on the performance of the organization. The management of the organization has the responsibility and obligation to carry out activities to prevent and combat fraud through the implementation of an organizational

culture based on ethical behavior. The perspective on ethical culture can lead to the emergence of one of the greatest risks of an organization. The business culture varies from organization to organization, and it is important to understand how it can affect the organization's risk management performance. Although most companies have a set of defined business conducts, there are situations where management behavior and decisions do not reflect those beliefs. Baxter et al. (2013) suggest that there is a possibility that some customers may have an influence on the people who run a company. Therefore, the financial reporting risk has been introduced in the audit procedures aimed at identifying fraudulent activities. The audit procedures were designed using fraud risk indicators, the ultimate goal being to achieve reasonable assurance about the financial position of an entity.

Carrera & Van der Kolk (2021) mention in their article the importance of the risk assessment and reporting process, which are the basis of the audit opinion. A high level of risk can influence the judgment of an external auditor to detect fraud. Effective risk management requires first and foremost transparency in internal and external risk reporting. Lam (2007). Dănescu & Prozan (2015) state the idea that annual reports are the leading source of information if we consider the analysis of the risk reporting process. At present, the information contained in the explanatory notes, as well as the details of a graphic or narrative nature, are the basis for the financial reporting risks. Cohen, Krishnamoorthy, & Wright (2017) explained how difficult it is to measure the quality of the risk reporting process, because in their perception, this aspect depends considerably on the subjective opinion of the user.

### **3. Conclusion**

According to a study by Association of Chartered Certified Accountants – ACCA (2021) how to manage and supervise risks is not fully understood, which is why there are a multitude of approaches and interpretations. These are usually closely related to personal experiences, or the role played within the organization. Regarding the management of financial performance, the risks were analyzed and assessed quantitatively, with the aim of avoiding fraud. ACCA (2021) considers that this approach is limited in terms of providing an adequate basis for decisions. The uncertainty created by the evolution of the COVID-19 virus has triggered a complex area of risks that affects all aspects for most entities. These aspects serve as future directions of research, considering that this event has significantly expanded space for the development of risk management process.

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## THEORETICAL REVIEW OF ENGINEERING CHANGE IN AUTOMOTIVE

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**Abstract:** *In the last period, the development processes have regularly been named as key to the development of new physical products. The findings indicate that successful change management strategy consists three phases: preparing to change, implementation of change, and measuring the impact on user.*

**Keywords:** Engineering Change; Engineering Change Request; Customer; Change management; Development.

**JEL classification:** O33

### **Engineering Change and Engineering Change Request in automotive industry**

The automotive industry is one of the largest manufacturing industries in terms of scale, revenue as well as processes and is also considered to be one of the largest drivers of economic growth across the globe. This is an industry that has its fulcrum not just on the strength of its manufacturing processes and engineering capabilities, but also on the strength of its parts procurement, assembly lines, supplier and distribution networks, quality testing. This paper explores the effect that change has on the automotive industry [PROLIM].

### **Engineering Change**

The competition in the market, the pressure to perform and the market readiness of the car are already pressure points in themselves, to which is added the pressure of the frequent change, which is inevitable.

From a high-level viewpoint, changes are made for two reasons: to remove errors from a product (rework) or to improve it in some way. The companies need to comply with configuration management and quality management standards. [Pikosz P, Malmqvist J].

### **Engineering Change Request**

Once a product is developed and its manufacture begins, its level of excellence immediately starts decreasing due to other competitive products on the market. Its life on the market can be prolonged by continual product improvements. Product improvements thus involve both the planning of new variants and the making of minor modifications [Zeljko].

Change request is document that describes required modification of software, product or item. Change request process is standardized through scientific research and industrial practice. The need for improvements of this process still exists and it is driven by shortened time to market, better customer satisfaction and adoption of new technologies [Zeljko].

The objective of this paper is to describe all steps of the engineering change request and to present the influence of the most important factors.

### **Flow for engineering change**

When a internal person from a company have a new idea, he needs to start a new engineering change request. In general, each company used a specific tool for create

the engineering change request. The first step is to start a new engineering change request. All necessary information's need to be in description of change. The responsible persons for create the engineering change request is called initiator [Bahram Hamraz].

The next step is the checking by manager of initiator which will decide if the change can be implemented in production and also will choose the flow depending the change. An engineering change request can follow three ways described below [Clark, K.B.].

For the next step, the initiator will complete all mandatory fields from engineering change request. He will upload all necessary documents, will completed the affected plants, will set the important dates like earliest and latest implementation date. For continuation the change will be presented to the qualified team which will decide if all fields are completed correctly, if all documents are presented and also if all necessary activities are prepared.

When the production is running with new change the engineering change request can be closed [Zeljko S.].

#### Correction flow

This flow is simple. It is started by initiator, is checked and approved from manager of initiator and after, the change will be implemented in production.

#### Simplified flow

In simplified flow flow exists only one difference from correction flow. In simplified flow exists a qualified team with persons from all involved departments.

#### Engineering change

This is the most used flow. All changes with customer involvement use this flow.

The steps are presented above, in chapter 2.

### **Facts and factors**

The change process is one of the most critical tasks of the product development process. Misinterpretation or lack of knowledge about impacts or risks of changes can cause serious disadvantages to companies, e.g., high failure or change costs or image losses caused by products with a quality that is unacceptable [Jan Conrad].

Reasons for the change process can generally be identified at the high level in form of suppliers (changing a process leads to changes e.g., in form of the introduction of a new supplier), customers (changing demands require changes in existing sales options) and internal departments (wide variety of reasons, mostly quality and reliability improvements, cost savings, changes to manufacturing processes, company-wide initiatives etc.) [Harhalakis G].

The presentation of the problem situation leads to the following research question: how must the engineering change management in an agile development project be designed to allow for an efficient interaction between development and production department for a rapid product optimization? [Gunther]

### **Coordination process**

One of the most important factor is coordination process in implementation of the new changes. For that this process to work are necessary some steps, like: tracking of all changes which are in run of development, regularly meetings with all involved persons from affected plants, establish the necessary activities for a correct implementation in production processes [Pikosz P.].

#### Implementation process

For a correct implementation in production system is needed a correct change description. In implementation process the first point is checking of change description, checking of affected product numbers, and checking if the latest implementation date is valid. The second point is to start the implementation in production system. Usually, the production system is SAP [Terwiesch C].

Impact in the process

When is implemented a new change on a product or process, at company level exists some factors which influence the engineering change process. These factors can be type of the chosen flow for engineering change request, if the customer is involved in process, all affected plants, costs which are generated by change, all necessary actions for a right implementation [Ullah, I.].

If the customer involvement is necessary, then it is known that exists some factors which will influence the customer approval. These factors can be capability studies, samples for customer with the new change, strength tests. The change can be for fit, form or function. [Yanyong].

Depending on type of flow chosen the engineering change request can have different time for processing. The correction or simplified flow always will take less time than an engineering change flow. If a new change will affect more plants which make same products that is important the time allocated have to be longer, because of more approvals and the traceability is an important factor in this case. All these issues are representing factors which can generate costs or the possibility to cancel the engineering change request in an advanced status.

### **Proposal and discussions**

This paper describes the approach of engineering change request. For a good strategy in engineering changes is proposed to analyze and assess the impact. The Change Impact Analysis combines two methodologies:

First, the theory as a basis to describe the product, to synthesize the change solutions and to analyze their impacts [Van L.].

Second, the FMEA-method as a mean to describe and quantify risks, to assess impacts and success probabilities of change solutions and to document the whole change process.

The approach is effective and usable for the analysis and assessment of the risks of engineering changes of products or processes. That can lead to a reduction of failure costs and an improved reliability of products and processes and even to a decrease of product call-backs.

The engineering change process is a vital part of any product's life and it links into all the major business functions, such as manufacturing, purchasing, marketing and aftersales support [Wright IC].

### **Conclusion**

In a constantly changing environment, managers have to permanently delimit which factors and what degree of pressure they act on the enterprise in which they operate. All in all, the literature review has shown that managing engineering change is a complex task.

Change management strategies are extremely well-known for the sustainability of an organization. Adopting to the engineering change request through change management will add a lot of success to a company.

This study found that the critical and successful factors for engineering change request are top management support, associates' involvement, information traceability and customer relationship.

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## **ANALYSIS OF ECONOMIC GROWTH AND INCOME INEQUALITY IN ROMANIA IN THE PERIOD 2009-2019**

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**Abstract:** *The article aims to analyze the relationship between economic growth and income inequality in Romania in the period 1990-2019. The “Gross Domestic Product” (GDP) per capita indicator from the World Bank database was used to show the evolution of economic growth, and the GINI Coefficient, extracted from the Standardized World Income Inequality database, was used to analyze income inequality. Romania's macroeconomic result (GDP per capita) registered a continuous growth trend in the period 1990-2019. At the same time, the GINI coefficient registered the same dynamics. This fact highlights, at first sight, that the phenomenon of economic growth has widened the gap between the rich and the poor in Romania in the studied period.*

**Keywords:** economic growth, income inequality, GDP per capita, Gini coefficient

**JEL classification:** O47, O15, E01

### **1. Introduction**

The relationship between economic growth and the evolution of income inequality is intensively studied by the economic literature in recent years, following the conclusions of various studies showing that the phenomenon of economic growth and development is accompanied by income distribution effects that are not always fair. More specifically, even if economic well-being in general increases, by increasing the wealth obtained, this may have the effect of increasing inequality in the distribution of income in society. The topic is of interest to policy makers as well, with the emergence of concepts such as social cohesion and inclusive development. Both are objectives of specific European Union (EU) policies. Thus, the promotion of social cohesion is the goal of the policy of the same name in the EU, and social inclusion is also pursued through community social policy.

As an EU Member State, Romania aligns with these policies and implements measures at national level, through its own social policies.

This paper aims to analyze the relationship between economic growth and income distribution in Romania in the period 1990-2019, based on the time series extracted from the World Bank database and the Standardized World Income Inequality Database.

The paper is structured as follows: after the introduction, in the second section, the concepts we work with are presented, then in the third section the evolutions of the two statistical indicators are described and analyzed, and the last part is dedicated to the conclusions.

## **2. Conceptual basis**

### **2.1. Economic growth**

Most economists agree that the phenomenon of economic growth means an increase in the amount of useful economic effects obtained in a given period of time (Ionescu, 2005, p.162).

In the economic literature this concept is used broadly and narrowly. In a broad sense, it means the increase of national wealth, national income, domestic product, in a given period of time. In a narrow sense, it refers to the positive evolution of the national income or the domestic product per capita in a given period. Regardless of the meaning, economic growth targets the quantitative side of economic results, as a whole and per capita, and involves not only the expansion of production potential, but also their combination with a higher economic yield.

The measurement of economic growth is done using statistical indicators such as gross domestic product, gross national product or national income.

In practice, the appreciation of the standard of living of a nation is achieved through the gross domestic product per capita, the purpose of economic policies being to stimulate its growth.

In order to analyze the evolution of the gross domestic product per capita in the case of Romania, we extracted time series from the World Bank database, opting for the Purchasing Power Parity (PPP) unit of measurement, for the period 1990-2019.

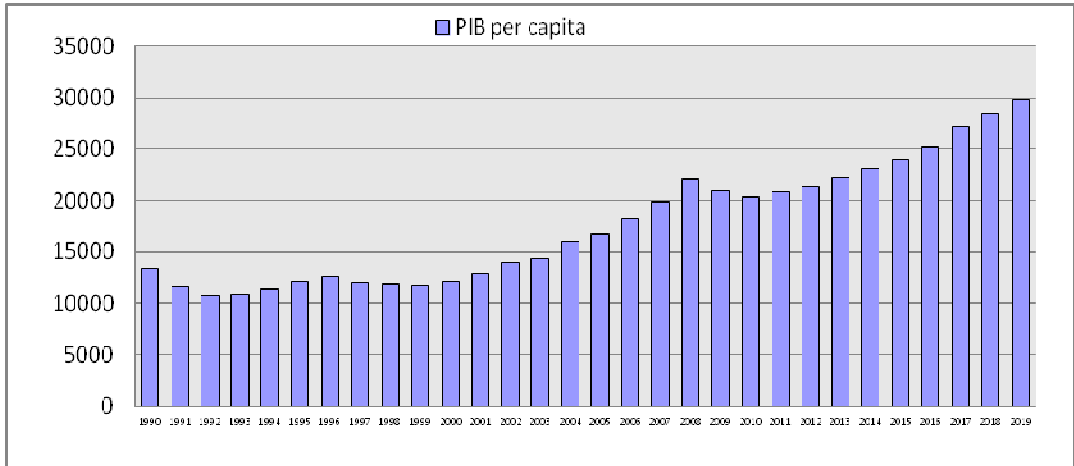
### **2.2. Income inequality**

The Gini coefficient is the most common tool for measuring income inequality internationally. It measures the distribution of income, comparing the income statement of each household with the income statement of all other households. By construction, the coefficient is expressed as a percentage value between 0 and 100. A Gini coefficient equal to 0 indicates perfect income equality; a Gini coefficient equal to 100 would mean that all the income obtained in the economy belongs to a single household, which would indicate the perfect income inequality.

We used the Gini coefficient available for Romania from the Standardized World Income Inequality Database. In this database, the calculation of this coefficient is based on observations collected from the OECD Income Distribution Database, Socio-Economic Database for Latin America, EUROSTAT, World Bank and national statistical offices (Solt, 2020).

## **3. The evolution of the gross domestic product and of the income distribution in Romania in the period 1990-2019**

The gross domestic product per capita registered an increasing trend in the analyzed period, from 13,302.47 USD in 1990 to 29,857.64 USD in 2019, representing an increase of 2.16 times in 30 years. Starting with the analysis of the evolution of GDP in 1990, it gradually decreases until 1992 to 10,757.39 USD. It is easy to see that 1990 is the first year of the new power after the fall of the communist regime. The revolution that took place in Romania in 1989 produced a multitude of changes in society. With the fall of this regime, the new power wanted to replace the socialist economy with the market one, based on free competition, Romania being in a period of transition to this economy.



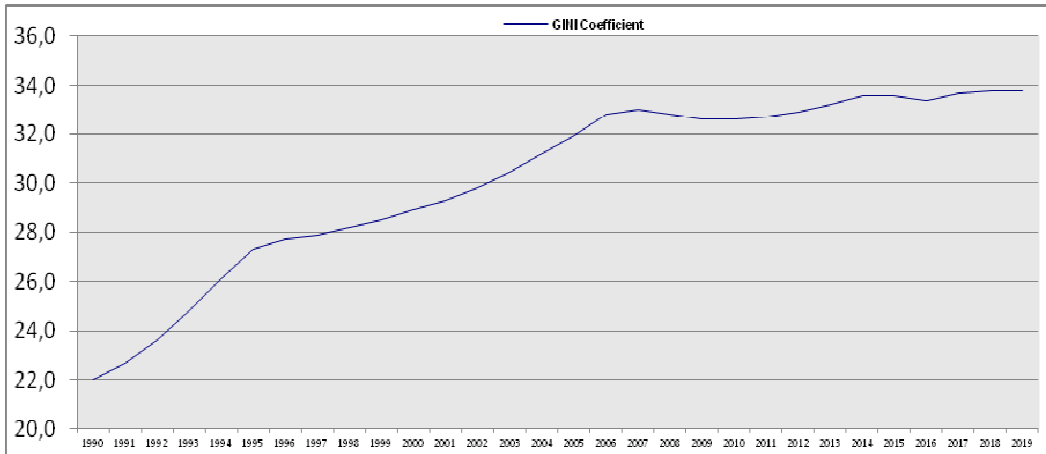
**Figure 1:** Evolution of the GDP per capita indicator for the period 1990-2019 (PPP, 2007 USD international constant)

Source: World Bank data processing, 2021

Thus, in the following years there was a period of search and redefinition with ascents and descents. After the revolution, the state gradually but not completely withdrew from its role of ensuring welfare (Ferge, 1997) because before the revolution the state was the main means of achieving social rights for all citizens. The aim was to include the whole population in one form or another of protection, people were obliged by law to find a job, work being compulsory, but at the same time, the job was practically guaranteed by state and the right to an income was established as a right based on citizenship. There follows a slight period of economic recovery, Romania managing to recover between 1993 and 1996 registering a value from 10,936.72 USD, to 12,627.20 USD, again following a worsening of the economic situation until 1999 when the value of GDP- reaches 11,803.37 USD. An explanation for this situation may be due to the fact that after the Revolution the possibility of early retirement was introduced as an alternative to unemployment. Thus, in 1997 the number of pensioners increased by exceeding 400,000 the number of employees, this circumstance is due both to the low number of employees and their desire to move in a new direction, ie to the private one. Thus, the decrease in the number of the active population was made both at the expense of the number of unemployed and at the expense of the decrease in the number of the employed population. From 2000 to 2008, the value of GDP increased rapidly from 21,095.55 USD to 22,044.30 USD and decreased again in 2009-2010 due to the economic and financial crisis. Georgescu (2013) states that the net flows of FDI (Foreign Direct Investment) in Romania amounted to values between 5 and 9 billion euros per year, in 2007 remaining in this range (7.25 billion euros) and reaching a peak in 2008 (9.5 billion euros), in 2009 they collapsed to 3.5 billion euros. Despite a slight recovery in international capital flows recorded globally in 2010, in Romania net FDI flows continued their contraction, falling to 2.2 billion euros, and in 2011 and 2012 falling even below 2 billion euros, respectively at only 1/5 of the level recorded in the pre-crisis period. And from 2011 GDP grows rapidly until 2019 to 29,857.64 USD, a year that records the highest value of GDP in the analyzed period. In fact, both the final aggregate consumption by sustainability according to data taken from Eurostat increased steadily from 2010 to



2019, and exports and imports by EU Member States had the same upward trend according to statistics taken from the elected site.



**Figure 2:** The evolution of the Gini coefficient in Romania during 1990-2019  
 Source: processing according to Standardized World Income Inequality Database, 2021

According to the data taken from the Standardized World Income Inequality Database, the Gini Coefficient registers an ascending trend for the analyzed period, from the value of 22 in 1990 to 33.8 in 2019. It increases considerably from the beginning of the analyzed period until 2007 inclusive. At the same time, Eurostat statistics on the at-risk-of-poverty rate according to the poverty line have the same upward trend. The Gini coefficient starts to decrease from 2007 from 33 to 2010 to 32.6. Moreover, the poverty risk rate according to the poverty line decreases from 2007 from 24.6 percent to 21.6 percent in 2010, increasing to increase by 2015 to 24.4 percent. Situation that also happens in the case of the Gini coefficient which increases until 2015 reaching the value of 33.6 and the year 2016 indicates a slight decrease to 33.4 and will increase again until 2019 when it registers the value of 33.8. This situation is influenced by the gradual decrease of the participation rate in education and training from 1.6 percent in 2011 to 0.9 percent in 2018. According to Molnar (2010) he stated that inequality is considered too great and unjust due to the huge gap between the living conditions of the majority of the population and the luxurious life of the rich, the well-known fact that many of the great and very high fortunes and incomes come from activities or capital accumulated in the underground economy, by breaking the law or by exploiting the weakness of the legal system, as well as by acts of corruption, while many poor people have neither the opportunity nor the possibility / ability to get a job, with much less one that allows for a decent income.

The value of the statistical correlation coefficient between the two time series is 0.89. Its value indicates a positive association between the two variables, an association that is statistically significant, a conclusion obtained after applying the ANOVA test, which indicates a P value of 1.64E-23.

The coefficient of determination is 0.7921, a value also high, indicating the close link between them, namely that the variation of one variable can be determined in proportion of 79% of the variation of the other, provided that the other factors remain constant. It is therefore suggested that the two variables evolve closely related to each

other, respectively the growth of GDP per capita is related to the increase of income inequality.

#### **4. Conclusions**

Following the analysis of the data series, we notice that with the economic growth, the income inequality is accentuated. As we said in the GDP analysis, the transition period from the socialist economy to the market economy influences the relationship between GDP and the Gini coefficient. At the beginning of the period, inequality increased because many households suffered higher or lower income losses due to high inflation and the economic recession, and others became richer, by right or wrong means. Later, inequality increased due to the increase in property incomes, salaries and incomes from self-employed activities related to certain professions and jobs, given the persistence of a large number of low and very low income households, related to lack of qualifications and employment opportunities, as well as large family responsibilities (Molnar, 1010).

Another aspect of the considerable disagreement regarding the effect of inequality on economic growth is addressed by (Shin, 2012) which examines both the positive and negative relationship between the two phenomena, which argues that income inequality refers to disparities in income distribution, ie to the difference between rich and poor. Moreover, (Barro, 2000) concludes that the effect of income inequality on economic growth is different depending on the state of economic development. Income inequality in poor countries delays economic growth, but income inequality in rich countries encourages economic growth. Romania is not among the rich and highly developed countries according to EUROSTAT statistics comparing the evolution of GDP in all member countries of the European Union (EU). Analyzing the two hypotheses, Romania would fall into the group of developed countries, which is debatable. This situation is also encountered in the analysis of the United States and France, cases of industrialized nations, according to reports in recent years the rate of economic growth of the United States is higher than that of France and yet the United States suffers a higher income inequality than France. According to case studies in the United States and France, we can assume that there is a positive relationship between income inequality and economic growth (Shin, 2012). This situation is also present in the case of Romania, being a developing country, income inequality encourages economic growth, proven by analyzing the relationship between the two factors, economic growth and income inequality, because the saving rate of rich people is higher than that of the poor. Redistributing income from rich to poor reduces the savings rate of the economy as a whole and could therefore lead to a decline in economic growth. Another reason is that the redistribution of income could reduce the incentive for the rich to work hard and this could also lead to a decline in economic growth. As a result, we can deduce that income equality makes economic growth lower and income inequality makes it higher.

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## UNDERSTANDING THE CONCEPT OF NATION BRAND IN THE CONTEXT OF GULF COOPERATION COUNCIL' STATES

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**Abstract:** *The study introduces the concept of nation brand, which is related to the destination and place branding and synonym to country branding, as well as explaining the meaning of these expressions. The analysis considers the relevant literature available and why it resonates well with the region of the Gulf Cooperation Council. It also analyses the specificity of the region, in an attempt to operationalize the international marketing concepts in a particular context. In the end, it acknowledges the limits of progress related to the conceptual framework and terminology confusions. The study brings in practical information, comprising a compendium of various discussions regarding the concept. As a result of the recognition of this marketing theory, the nation brand will be applied consciously for the purpose of competitive identity, bringing more advantages to concerned states.*

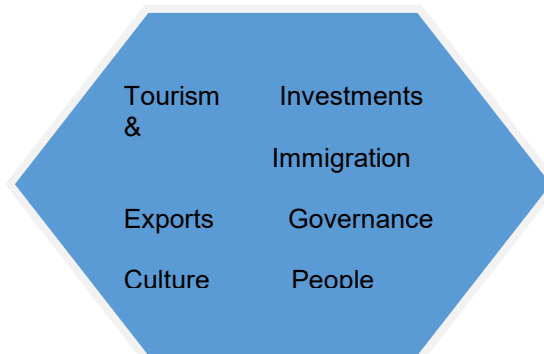
**Keywords:** nation brand; country image; competitive identity; Middle East; marketing

**JEL classification:** M38; N45

### 1. Introduction

At the very beginning, the article systematizes the relevant scholarship regarding the topic of the *nation brand*. In this respect, it highlights the important concepts from the available literature and the most prominent authors in the domain. We live in an era of branding. Everything has an implicit branding, products, and services operating daily with the notion, but also countries. This phenomenon was baptized *nation brand* by the British marketing consultant, Simon Anholt. There were previous attempts to brand places in a similar manner you brand products. The father of marketing Philip Kotler together with some authors launched a seminal book in 1993 under the name "Marketing Places: Attracting Investment, Industry, and Tourism to Cities, States and Nations". From that moment on, it was understood that the concept of branding a country is not easy to distinguish from other geographical approaches to branding. Destination branding is often confused with nation branding, country branding, or, largely speaking, with place branding. The literature surprised the terminology difficulties in the study entitled "Destination branding – Creating the unique destination" edited by Morgan, Pritchard, and Pride (2011).

When it comes to nation brand and nation branding, the ones who coined the terms are Simon Anholt (1998), and Keith Dinnie (2008). There is also Wally Olins, who is more connected to the public relations realm, the author of the book “Trading identities”, issued in 1999. He explained the concept from a perspective that values more the aspects regarding the way you conceive and convey a brand rather than economic benefits. However, the main element of the nation brand is the incorporation of economic marketing concepts and techniques to countries, for the sake of obtaining a higher (more visible) position at the international level. We note that nation branding is equal to country branding, but the latter is preferred where there is no consensus regarding nation and country (Papp-Váry, 2018). After validation of the nation brand, Anholt added competitive identity to describe the overseeing of the nation brand through investments, tourism, and culture (Anholt, 2007). Anholt suggests this term is touching upon six layers deemed important (see Figure 1). He notes that the contemporary economy is a globalized marketplace, where countries have to grab more resources, such as investors, tourists, and consumers (Anholt, 2007). The stronger the image of a geographic territory, no matter if we consider a place, city, destination, or country, the stronger its competitive identity.



**Figure 1:** The elements comprising a nation brand proposed by Anholt  
Source: author’s adaptation after Anholt (2005)

In essence, Anholt proposed a six-layer model for understanding what is branded and what is boosted through nation branding, all elements being mutually dependable. *Exports* are connected to the concept of “made in” (Anholt, 2008) and it means consumers avoid or actually seek to buy a certain product/service from the respective country. *Governance* relates to the elements we associate with leadership’s realization (Anholt, 2008). *Investments & Immigration*: a component measuring the attractiveness of a country for different economic opportunities. It represents the desire to live and work in a country for a prolonged time (Anholt, 2008). *Culture & Heritage*: it measures the knowledge about the cultural heritage (under various forms, sport, and religion included) of a nation (Kaneva, 2011). *People*: accounts for the population’s reputation as being open or friendly (Sahib, 2020), or on the contrary hostile. *Tourism*: translates the people’s interest in visiting a country and its natural or man-made attractions (Anholt, 2007).

Another related concept is the country image that Kotler views as a corollary of ideas and impressions people hold about a certain country (Kotler et al, 1993). The paper will continue the discussion on the relevance of the concept and its importance in the Gulf Cooperation Council (GCC) region.

## **2. Discussing the nation brand in the GCC context**

The analysis notes that the topic received a narrow focus in the Middle East, compared to the United States of America's brand or European countries that received extensive attention from scholars. The six Arab-speaking countries, subject of the analysis, are the following: Saudi Arabia, Kuwait, the United Arab Emirates (UAE), Qatar, Bahrain, and Oman. They are part of a political entity established in 1981, called the Gulf Cooperation Council (GCC). This sub-regional group links one of the wealthiest countries in the Middle East, most of the wealth being derived from the strategic oil and gas resources. This accumulation of wealth materialized in other strengths, in the past decades having developed infrastructure, busy international airports, global tourist attractions, some of the countries being synonym with glamour, namely the UAE and Qatar. The cities of Dubai or Doha have reached spectacular standards (Alraouf, 2016). The UAE takes the lead in branding, Dubai being the model favored by others in the region as a testimony for its strong brand since it pioneered a lot of activities in the GCC that follow Anholt's path. Govers (2014) would describe what happened to Dubai as a "*de facto place brand*". One of the possibilities that allowed Dubai to thrive is that it had a vigorous and stable policy in the 50-year since independence (dating 1971). This stability enabled the creation of campaigns that sustain what Anholt understands by a complete nation brand: exports, investments, immigration, and cultural attractions. The particularity of the GCC lies in the fact that these micro States have reached the success that few analysts envisaged. UAE and Qatar, Bahrain and Kuwait had a very low number of local populations knowing a sharp decline after the pearl trade was going slow. Nowadays, these countries broke records and pioneered events that fall under Anholt's framework. They host tournaments, FIFA 2022 scheduled to take place in Qatar would be a first for the Middle East, Dubai hosted (in place in 2021) World Expo 2020 and various global-scale events. Abu Dhabi and Bahrain organize annual races in the calendar of Formula 1. All the events create a competitive identity, as Anholt suggested, through the dimension of investments, bringing skilled labour, man-made cultural attractions (given the scarcity of natural attractions in the desert landscape other than the desert itself). Not only Dubai and Qatar but also Kuwait and Bahrain and Saudi Arabia and Oman have strategies for tourism, Oman is known for the specific flavor of Arab culture (Al Balushi et al, 2013). These strategies pay off in terms of consolidating economic variation and swaying from dependence on oil revenues. In addition, they are all Islamic nations, although sometimes the term is confused with fundamentalism. In this sense, Anholt highlighted that clichés and stereotypes alter people's views about places (Anholt, 2007). This is why the GCC States come forward with events that are recommended in Anholt's book, in order to deter these negative vibes associated with the Middle East.

### 3. Conclusion

It is important to note that the concept of branding resonates well with the contemporary context, which requires rapid affirmation in the global arena. Given the intensification of the regional economic integration, digitalization, technologizing of the business environment, events are utterly interconnected. Under such circumstances, one tool borrowed from marketing, namely the nation brand helps creating distinction among countries. However, according to Olins (1999) creating a stable country image is a more difficult and complex process than a brand for a product, because of the governance's inherent challenges and the occurrence of external (and uncontrollable) events. Nation branding has received more attention in the 2000s, even though the essence of the notion is not new (Olins, 1999). What is striking in the GCC case, it is the need to obtain a certain level of independence vis-à-vis oil revenues for sustainability. It is a long-term goal, similar to consolidating a nation brand (Dinnie, 2008). A motivating brand involves major stakeholders (Anholt, 2007) and it is appealing to a broad audience, own citizens included. The difficulties related to the conceptual framework regarding the nation brand and the confusion often encountered when it comes to terminology hampers strict conclusions regarding the progress of the notion once it was established. However, it has become the tool of option, consciously or not, owing to the idea of competitive identity. More awareness regarding the concept would render its application more efficient. Wally Olins explains (Olins, 1999) that a nation brand requires profound and momentous changes, not just mere adjustments. When the GCC States embarked on the journey for diversification economic revenues, they acted in several directions, which are implicit dimensions of the nation brand proposed by Anholt (see the mentions about events, infrastructure, investments). The GCC region needs sustainable nation/country brands in order to explore new avenues of development and outgrow the economic model based on oil, corresponding to an already existing country image - an island of wealth in the turbulent Middle East.

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## COMPETITIVENESS AND COMPARATIVE ADVANTAGE IN TOURISM

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**Abstract:** *The competitiveness of the tourism destination involves analysing/processing the competitiveness of tourism destinations considering the particularities of the tourism services sector, but at the same time, in order to determine the competitiveness of tourism destinations, determinant factors for business competitiveness are also taken into account. The comparative advantage involves the existence of a resource that creates an advantage of a destination in comparison to others, while the competitiveness reflects the manner in which the resources are used in order to create differences. Unlike the comparative advantages of a destination, which represents the development place of the tourism activities, the competitive advantages represent a complex of strategic actions that can contribute to the increase of the competitiveness of a destination.*

**Keywords:** tourism destination; competitiveness; competitive advantage; comparative advantage; resources.

**JEL classification:** A1; M1; Z3; Z30; Z31; Z32

### 1. Introduction

For the tourism sector, the studies on comparative and competitive advantages are centred on several approaches that belong to the authors Ritchie and Crouch (2003) and also Dwyer and Kim (2003). These points of view are comprised in specialised papers regarding the competitiveness of tourism destinations, to which other opinions are relevantly included in addition to those already formulated. When analysing the specialised literature we can note the increased interest of specialists in identifying the sources of the competitive advantages. The importance given to this topic consists in the multi-faceted functions that competitive advantages fulfil in assuring the competitiveness of a tourism destination.

### 2. Methodology of the research

The major objective of this paper is to give a review of the specialised literature regarding different views formulated on competitiveness and comparative advantage in tourism and also to identify the sources of comparative and competitive advantages in the tourism services sector.

The period of the research: October 2021.

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, taking into account the number of quotations; the review of the main points of view regarding the studied problems; the formulation of some conclusions and the issuance of some new work hypotheses.

### 3. Comparative and competitive advantages in tourism

Sources of comparative advantages in the opinion of the authors Ritchie and Crouch (2003, pp. 20-21) refer to: human resources (the quality of the human resources in the tourism sector influences the competitiveness of the tourism destination); natural resources (they significantly contribute to the attractiveness of a tourism destination); use of tourism knowledge/information for the proper development of the activities in the field; capital resources (investments in the tourism sector, development of the tourism industry, registered financial performance); tourism infrastructure (accommodation units, food, leisure and treatment) and the general one (road network, water supply, gas and electricity), rational use/management of resources being essential for ensuring the long-term competitiveness of a destination. In order to achieve this objective it is necessary to: educate and train the human resources, invest in tourism, develop the general and tourism infrastructure and also to promote. While the comparative advantages take into account the available resources of a destination, the competitive advantages refer to the ability of a destination to use these resources in an efficient and sustainable manner. The competitiveness of the tourism destination involves both the comparative and the competitive advantages (Ritchie and Crouch, 2003, p. 29). The authors emphasize the interlinkage between the two concepts meaning that a tourism destination becomes competitive when it has a tourism basis (either natural or anthropogenic) capitalized at a level at least equal to other leisure alternatives. In order to achieve a competitive advantage, any destination must make sure that its global "attraction" and the offered tourism experience are superior to other alternative destinations (Dwyer and Kim, 2003, p. 369). As a result of the globalization impact on the tourism sector, the management of tourism destinations seeks to offer attractive alternatives, unique through tourism experiences that would increase the level of attractiveness of a tourism destination. In specialized studies, the competitiveness is related to the competitive advantage, while the comparative advantage is a source of international competitiveness. For a tourism destination, the comparative advantage refers to natural resources (climate, landscape, flora and fauna), while the competitive advantage refers to the created elements, such as tourism infrastructure (hotels, attractions, transport network), festivals and events, quality management, workers' skills and government policy (Dwyer and Kim, 2003, p. 372). The authors' opinion regarding the comparative and competitive advantages in the tourism sector overlap with those formulated by Ritchie and Crouch on competitiveness in "*The Competitive Destination - A sustainable tourism perspective*", 2003. Dwyer et al (2004, p.1) consider that in order to obtain a competitive advantage in the tourism industry, any destination must ensure that its overall attractiveness and tourism experience are superior to other destinations. Here, we note a point of view through which the authors offer another perspective on the competitiveness of the tourism destination, namely they see the attractiveness of the destination and the experiences lived by tourists as a starting point. These experiences are firstly related to the trip reason, the authenticity, the satisfaction of needs, the fulfilment of wishes and the quality of the tourism services. The comparative advantages refer to the available resources of a destination, the competitive advantages mean the ability of a destination to use these resources on long term (Omerzel, 2006, p. 168). The author's simplistic approach highlights the importance of managing efficiently the resources of a tourism destination so as to ensure sustainability, seen as a source of competitiveness of tourism destinations. Sainaghi (2006, p. 1053) considers that destination management organizations play

a particularly important role in helping local businesses build a sustainable competitive advantage for the entire tourism sector. This point of view formulated by Sainaghi resumes Ritchie and Crouch's (2003) perspective regarding the importance of the destination management organizations (DMO's) in increasing the competitiveness of the tourism destination. From Hong's perspective (2009, p. 11), the comparative advantages are classified into two categories: exogenous comparative advantages (natural and anthropogenic tourism objectives) and endogenous comparative advantages (those resources that can be improved or modified in order to increase the competitiveness of a tourism destination - resources human, conservation of the environment/natural resources). The classification criterion takes into account the existence and availability of resources. The competitive advantages identified by Hong (2009) include: tourism infrastructure; strategic planning of market relations; rational use of resources; monitoring the allocated resources; the growth and economic development of the country/region/tourism destination that provides a general infrastructure necessary for the development of economic activities and can contribute to attracting investors in the tourism sector; offering/marketing integrated package tours; facilitating the access to different service categories (for example, telecommunications and banking services); specific management activities of the tourism destination; the interest of local authorities for the conservation of different categories of tourism resources; marketing activities (for example, the development of tourism products and services, pricing policies aimed at reducing the significant differences between tariffs from peak season periods and those from off-season, distribution channels orientated towards target segments of tourists, the development of unique tourism services); the cooperation between tourism service providers; the access to various information categories necessary for the adequate development of tourism activities; offering different categories of tourism services (Hong, 2009, pp. 111-117). Analysing Hong's perspective regarding the sources of the competitive advantages in tourism, we can note the diverse character of the elements that contribute to the success of the tourism activities in a certain area/region/country, which can also explain the complexity of the tourism phenomenon. Shirazi and Som (2011, p. 77) consider that due to the intensification of competition and globalization, achieving competitive advantages is very important for tourism destinations. Furthermore, the authors Shirazi and Som (2011, p. 77) formulate the idea according to which any neglect in managing the destination resources can create a considerable obstacle in achieving competitive advantages. In this respect, a critical role is played by the destination management for the development and realization of the competitive advantage of the destination. The authors' perspective brings to the foreground the direct relationship between the sustainability of tourism activities and the competitiveness of tourism destinations. Risteski et al (2012, p. 379) in the paper "*Spatial planning and sustainable tourism as basis form developing competitive tourist destinations*" nuances the disadvantages of the new strategies regarding the competitive advantage of the tourism destinations, which are due to the following elements: the comparative advantages are no longer natural; tourism is a volatile industry, sensitive and extremely competitive; the tourism industry is in a continuous dynamic; tourism activities greatly influence the dependent sectors as well. Furthermore, the authors (Risteski et al 2012, p. 380) identify the factors that determine the performance of a tourism destination: comparative advantages, competitive advantages, tourism markets, competition, objectives and target market strategies. Understanding the comparative advantages in tourism is essential for a country, taking into account that tourism is an important sector both for advanced and emerging economies. A strong tourism sector contributes to the increase of the gross

national income, supports the creation of jobs and improves the balance of payments (Algieri et al, 2015, p. 2). Zehrer et al (2016, p. 2) in the paper "*Destination Competitiveness – A Comparison of Subjective and Objective Indicators for Winter Sports Areas*" states that in addition to the comparative advantages that were thought to be of major importance for a company's competitiveness, it has become clear that competitive advantages are also relevant to the long-term success of tourism activities in a tourism area/region. In order to compete in the tourism sector, a destination should obtain not only comparative advantages but also competitive advantages and, therefore, offer different tourism products and resources efficiently managed in the medium to long term. (Esteva et al, 2016, p. 125). The comparative advantage can be seen as a relative concept, meaning a country is relatively more appropriate for the production of some goods than others. The comparative advantage depends on the relative differences between countries, which are related to real production costs. The competitive advantage is a concept absolutely related to the absolute international differences in respect to the production factor costs (for example, labour costs) and exchange rates. If a country is, in principle, more productive (meaning that it has an absolute advantage in everything), then it must have higher real salaries (Algieri et al, 2018, p. 43). Shirazi and Som (2011, p. 77) consider that due to the intensification of competition and globalization, achieving competitive advantages is very important for tourism destinations. Furthermore, the authors Shirazi and Som (2011, p. 77) formulate the idea that any neglect in managing the destination resources can create a considerable obstacle in achieving competitive advantages. In this respect, a critical role is played by the destination management for the development and realization of the competitive advantage of the destination.

## **6. Conclusions**

The review of the specialized literature on competitive advantages in the tourism sector allowed the formulation of the following conclusions: the comparative and competitive advantages are interdependent and target to achieve the same categories of objectives (economic and psychological); the comparative advantages represent the essential condition for the development of tourism activities, but do not ensure their success; the competitive advantages involve concrete, diverse and complex actions so as to ensure benefits for the involved parties (tourists, tourism service providers, local communities and central authorities); the competitive advantages involve an ensemble of factors (economic, technological, political, personal and social) that when properly managed can ensure the competitiveness of a tourism destination; creating competitive advantages for a tourism destination represents the joint efforts of the public and private sector; the selection and capitalization of competitive advantages for a certain tourism destination are the result of some strategic actions achieved through the joint effort of all parties involved.

## **5. Limitations and further research**

This paper is a selection of the most cited papers regarding the issue of comparative and competitive sources in the tourism services sector, representing an illustration of the main approaches regarding the assurance of the tourism destination competitiveness. This article offers only a general perspective on the researched topic, without giving an exhaustive presentation of the studied issue. In the future, it would be interesting to research the impact of new technologies in terms of the tourism destination competitiveness.

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## THEORIES OF ECONOMIC SUSTAINABILITY AT THE FIRM-LEVEL

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**Abstract:** *There are two approaches to business sustainability: the absolute and the relative approach to sustainability at the firm level. Due to certain limitations of these older approaches, a newer approach through which we are able to determine whether the company has reached the absolute sustainability threshold and where resources should be allocated to maximize the contribution to sustainability can prove a better choice. The Sustainable Value Added creates a relative measurement tool that judges business sustainability in terms of opportunity costs, rather than external costs. By following the steps for determining the Sustainable Value we can calculate the sustainability efficiency of a company.*

**Keywords:** economic sustainability; business sustainability; sustainable enterprise; firm-level; sustainable value added.

**JEL classification:** M20

We can distinguish two types of business sustainability approaches (and therefore measuring instruments) (Figge, Hahn, 2004), which is also reflected in specific measurement instruments, as these trends are strongly striving for operationalization. These are: the absolute approach to sustainability at the firm level and the relative approach to sustainability at the firm level.

Under the absolute approach, the costs generated by a particular company must be deducted from the costs of the company's activities in order to understand the impact of the company's sustainability. This approach is the application at company level of two national sustainability indicators related to neoclassical economic theories (Atkinson et al, 1999). In this case, the company can be sustainable if the benefits of its activities exceed the internal and external costs of this activity. If these external costs are compared to the net added value, we get the so-called Green Value Added – GVA, and if we compare them with the profit, we get the Adjusted Profit or the Green Profit.

In connection with this concept of absolute sustainability, the following issues have been identified in the literature (Figge, Hahn, 2004):

- problems encountered in applying the monetary valuation (as a necessary step);
- problems arising from the fact that the concept allows substitution between types of capital

and, in this context, contributes to sustainability only in absolute terms, but says nothing about the maximum possible contribution to sustainability (i.e. it only says if a company is sustainable and says nothing about the optimal allocation of resources).

Unlike the absolute approach, the relative approach offers, in principle, the benefits

per unit of environmental impact or at the social level at the firm level (Figge, Hahn, 2004).

Recognizing the limitations of absolute and eco-efficient approaches, respectively, Figge, Hahn (2004) have developed a relatively new approach. Their starting point is that a theoretical framework for the sustainability of enterprises (and the measure that makes it operational) must be able to capture both efficiency and effectiveness. That is, it must be able to determine, on the one hand, whether the company has reached the absolute sustainability threshold (this is the "If" question, i.e. is the company sustainable if it uses that resource?), and where resources should be allocated to maximize the contribution to sustainability (this is the "Where" question, i.e. where should we allocate resources for optimal use?), on the other hand.

The "perfect" measure of sustainability would be the Absolute Sustainable Value Added that we would obtain by adjusting the added value according to the external ecological (environmental) and social costs and the opportunity cost. However, due to accounting and monetization of external costs, this is probably impossible (or at least too reductionist), so the authors (Figge, Hahn, 2004) consider that the definition of Relative Sustainable Value Added (SVA) is a realistic objective (i.e. to know and quantify externalities so that they can be expressed without a monetary valuation), for which opportunity costs provide a path.

Sustainable Value Added seeks to answer the "Where" question: it determines which actor should use the resources to ensure the greatest contribution to sustainability. Therefore, it does not answer the question of whether the actor himself uses the resource in an absolutely sustainable way, only to what extent (in monetary terms) he uses it more sustainably than other actors. Thus, it creates a relative measurement tool that judges the sustainability of companies in terms of opportunity costs, rather than external costs.

The starting point of the concept is that less efficient users of certain environmental and social resources give them up in exchange for compensation. The analysis of this condition is particularly important if we want to understand the relevance of the concept for sustainability at the macro level. The very existence of SVA simply means that the company that produces it can theoretically compensate the less efficient user of a given resource to avoid a negative impact on the environment. That is, a company is able to offset the environmental impact caused by its own growth, paying less efficient companies to reduce their impact on the environment (at the cost of the company's environmental efficiency to be compensated for a given resource). Thus, the total magnitude of the effects does not change in theory, because the increase creates enough value to compensate for the recoil effect by buying effects on the environment (reducing them) from others.

The model developers, in their subsequent work, (Figge, Hahn, 2005, Hahn et al, 2007) provide specific methodologies for assessing the sustainability of enterprises in the above system, through practical examples. They emphasize that three decisions must be made before starting the specific calculations. The first is to determine the scope of the analysis (economic activity / actor and types of capital taken into account), the second is to select a benchmark, and the third is to ensure that the company's performance data and benchmark match both the time period and the quality of the data and in terms of coverage. Thus, the steps for determining the Sustainable Value are those presented in Figure 1.

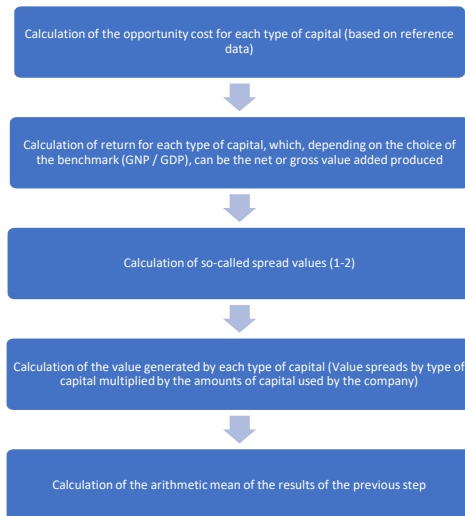


Figure 1. Steps for determining the Sustainable Value  
(Source: edited by the author after Figge, Hahn, 2005, Hahn et al, 2007)

Following these steps, the so-called “sustainability efficiency” is obtained as a coefficient of the value added produced by a firm and the opportunity cost of sustainability capital (i.e. by dividing the value added produced by the firm by the arithmetic mean of the types of capital used by firm and their opportunity costs).

Approaches of the sustainability of enterprises in the economy:

- Relationship with economic growth: treats the existence or non-existence of economic growth as a skill.
- Relationship with stakeholders and the natural environment: does not place this along the normative / instrumental dimensions, the concept is purely descriptive.
- Uncertainty and precaution: Although the theory is based on strong sustainability, the theory states that it only examines the fulfillment of one of its preconditions (proper efficient use of natural and social capital) and we cannot affirm that it raises these issues.
- Hierarchy of welfare objectives (efficient allocation, ecological sustainability, justice): it does not take a position, it is purely descriptive.
- Does it raise “broader” sustainability issues of the company's operations, such as the company's impact on social values and the regulatory environment? It is suitable for the analysis of a very wide potential range of business activities (environmental and social impacts); during operationalization, the analysis is restricted and does not address these issues.

## Conclusion

After examining the limitations of the absolute and the relative approach to sustainability at the firm level, a newer approach, through which we are able to determine whether the company has reached the absolute sustainability threshold and where resources should be allocated to maximize the contribution to sustainability, is proving to be a more suitable choice. The Sustainable Value Added presents a relative measurement tool that judges business sustainability in terms of



opportunity costs, rather than external costs. Determining the Sustainable Value helps us calculate the so-called “sustainability efficiency” of a company.

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## DO COMPANIES NEED NEUROMARKETING FOR BUSINESS GROWTH? THE CONSUMER'S BEHAVIOUR LANDSCAPE

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**Abstract:** *The scientists address the decision-making process by introducing the need of incorporating the neuroscience as a tool for marketing research field. The concern of the authors for this topic pursued to interpose the neuromarketing advanced techniques in companies' business growth strategies. This literature summary presents a shifting traditional marketing that underlies the major implications of advanced techniques to study the true desires and the emotional effect that products or services have on the brain to obtain the competitive advantage. Loyalty, trust, and the true reasons why consumers buy from a particular brand can be reached if the companies understand the impact on their growth. Doubtless, the challenges that companies can face affect profit growth and the long-term development, but a prepared academic environment with modern education-based models and ready for support can control any issue.*

**Keywords:** neuromarketing; business growth; consumer behaviour; entrepreneurial university.

**JEL classification:** D87; L21; L26; M10; M31

### 1. Background

Marketing specialists are trying to understand the increasingly complex decision-making process of today's consumers' behaviour and the environment in which they operate. To this end, they study the determinants of purchasing decisions from a multidisciplinary perspective. Given that marketing has changed considerably, researchers are adapting to the multidimensional vision of consumers, addressing concepts such as emotions, prejudices and values in studies, so far several types of automated methods applied for research purposes have been developed (Stasi et al., 2017). Some of the most interesting ones address the neural mechanisms that underlie the decision-making process and have evolved in the field of marketing research, which is constantly evolving (Golnar-Nik et al., 2019). These include measurements to monitor biometric responses, including eye tracking, facial expression, galvanic skin response, functional magnetic resonance imaging (fMRI), magnetic resonance imaging (MRI), cranial magnetic stimulation (TMS), and finally, electroencealography. (EEG), which has gained special attention in recent years (Ait Hammou et al., 2013; Šola, 2021).

## **2. From traditional marketing to neuromarketing**

The use of these technologies underlies neuromarketing (or 'consumer neuroscience' (Smidts et al., 2014) an emerging field that combines perspectives from marketing, neuroscience, economics, decision theory and psychology. Neuromarketing uses brain imaging technology to effectively reveal the underlying reasons for consumer behaviour and to predict decision-making processes (Thabani & Wellington, 2017), (Hubert & Kenning, 2008), (Senior & Lee, 2008), (Stasi et al., 2017), and (Ma~ Nas-Viniegra et al., 2020) support the potential of discovering automatic brain processes that determine purchasing decisions with major effects for companies and society, and the literature argues that information obtained through the analysis of biometric responses may be more reliable than that obtained through questionnaires (Golnar-Nik et al., 2019). While traditional marketing can yield results in understanding consumers' needs, neuromarketing covers their true desires and the emotional effect that products or services have on the brain. For example, if a company seeks to develop consumer loyalty and trust in its brand, it must not only meet their requirements, but also cause them to become emotionally attached to the brand, packaging, advertising, price, etc. (Thabani & Wellington, 2017). Therefore, the role of neuromarketing as a research tool has become increasingly addressed in recent studies.

Considered a competitive advantage, neuromarketing offers companies the opportunity to save valuable resources in obtaining details about the unconscious responses of consumers. The ability to discover consumers' reactions to stimuli without interviewing them leads to intuitions and predictions about their behaviour, with major implications for the entire business strategy. That's why companies that rely on neuromarketing have a real competitive advantage, offering much more appropriate products that the consumer is more likely to want. In the same row, if only 0.01% of the human brain is conscious, and a company applies the only technique that gathers information about the remaining 99.99% on which competition does not focus, the advantage will be obtained (Senior & Lee, 2008).

## **3. Challenges for companies and solutions through modern education**

Although neuromarketing can offer companies the potential for profit growth and long-term development, it is true that the implementation of solutions for the use of methods specific to consumer neuroscience by companies cannot be achieved so easily. The high cost of technologies, finding participants for research samples, multidisciplinary know-how and the low number of specialists trained on the market to conduct such studies are real challenges. Mitigating the negative impact of these challenges can be achieved through modern education (Thabani & Wellington, 2017). The literature presents modern approaches by including neuromarketing in the fields of economic and managerial training, student involvement, creation of teaching materials, use of neurobiological research results in university marketing activities, etc. (Ababkova, 2018).

In addition, the existence of recent studies on the transformation of universities into entrepreneurial universities (Bratucu et al., 2020; Fischer et al., 2020; Forliano et al., 2021; Genç et al., 2020; Graf & Menter, 2021) highlight the framework for undertaking business and marketing consulting activities to provide the necessary support for research using advanced neuromarketing techniques. Given that universities are seen as the main actors of technological change, innovation and social development through research and entrepreneurship, providing cooperation in the industry-university relationship through education and training (Genç et al., 2020).

#### 4. Conclusions

The concern of marketing specialist to incorporate the consumers' behaviour analysis in neuromarketing techniques leads to a multidisciplinary perspective. The use of neuroscience to improve decision-making process research by understanding how true desires of the consumers and their emotions influence the attachment to a brand can represent a real competitive advantage for a company. The opportunity of discovering the consumers' unconscious responses has major implications for the entire business strategy, especially when the company aims to grow.

With a modern education-based model, the universities can perform business and advanced marketing consulting sessions for companies, providing the necessary resources for research and growth strategies creation and becoming important stakeholders through their entrepreneurial status.

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## CONSUMER PERCEPTION RESEARCH ON ONLINE MARKETING THROUGH INFLUENCERS

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**Abstract:** *Any business or brand that wants to promote its product / service in an efficient way and with visible results in a short time, is aware that an influencer can have a positive impact on the communication campaign. Especially in recent years, influencers have been given the opportunity to express themselves and influence potential or even actual, current consumers. Thanks to social networks, they can quickly build a network of fans and supporters and easily communicate their opinions, ideas and experiences with products. The purpose of the survey for this paper was to determine if and how much influence opinion leaders influence consumers in purchasing decisions. This survey also identified products where consumers rely heavily on the opinion of influencers and areas where the opinions of influencers are considered the most credible and of course what are the main actions of thinking or buying after contact with advertising through them. This trend is still unexplored to its full potential.*

**Keywords:** Digital Marketing, Search Engine Optimization, Influencers, Consumers, Social Media

**JEL classification:** F19, F21

### 1. Introduction

In a society in full ascent and movement, transformation such as the one we live in today, people becomes the center of this tumultuous informational universe that determines them to be much more attentive, much more interested and much more willing to change, periodically redefining their perception, on the present and the future (Negricea, 2010). The Internet provides individual users with constant and unlimited access to information, entertainment and more importantly, communication. And as we all know, information is power, these individuals in the online environment have more power than they have ever had. The online environment offers unlimited access to almost any desire of the individual: they can buy, they can sell, they can check prices and descriptions of products / services, can search for information and choose the most suitable for them. At the same time, they can satisfy their needs such as movies, music, choosing for themselves when, where and from whom they want to receive this content. If until a few years ago, the consumer was at the center of the universe of any business, trader because all their actions were carried out and directed towards them, now information and actions no longer flow in one direction, they are bi-directional (Strauss, El- Ansary and Frost, 2006).

With the emergence of multiple forms of business manifestation governed by the existence of the Internet and new technologies, new concepts have emerged that encompass the broad or narrow meaning of this wave of new information. From this evolution resulted: e-business (by which we understand the concept of electronic business), e-commerce (by which we refer to electronic commerce) and e-marketing / online marketing (which refers to electronic marketing/ through internet) (Negricea, 2010).

## **2. Methodology**

In order to communicate with the unit under investigation, we used a structured market survey, more precisely a questionnaire composed of the same questions formulated in the same way and which were presented in the same order to all subjects.

The questionnaire started with a rather short introductory text designed to familiarize respondents with the topic addressed in the research, identification data of the researcher, the duration allocated to its completion and the mention of personal data protection and use of their results strictly for statistical purposes. The questionnaire was easy to complete, with clear and easy to understand questions, relevant to the topic approached in the research, which were ordered in a logical way and for which a language as clear and simple as possible was used. The studied population that forms the basis of the sample here is made up of all the simple units made up of individuals from Romania, men and women from urban and rural areas. The observation unit in the sample is one and the same here with the survey unit made up of envious people with internet access, who have met at least once with online advertising and who are aware of online marketing through influencers.

The method by which we determined the sample is a non-random method, so implicitly unlikely that started from the specific features that the observation unit and implicitly the survey unit must denote, namely to be individuals from Romania, necessarily with internet access, who have met with online advertising at least once and who are aware of online marketing through influencers. The probability of a sampling unit being included in the sample is not known. We chose the "snowball" method because the typology and size of the population is unknown and small. Therefore, this method also involves choosing a small number of units from the population. The individuals who were subjected to the investigation are for the first time persons with the characteristics mentioned above, and I will later ask those persons to forward the questionnaire to other persons who consider that they could in turn be characterized by the same properties. In the present case, because the method chosen to determine the sample size is unlikely,  $p$  cannot be defined without information on its exact value, we considered  $p = 0.5$ .

## **3. Main findings of the research**

In contemporary globalized markets, opinion leaders or influencers as they are now called, play a key role in the consumer purchasing decision-making process.

Due to their individual abilities, specific knowledge and / or personality, opinion leaders have a direct or indirect influence on consumer attitudes and decisions. In contemporary globalized marketing through social media, with the help of influencers who make their mark on the thoughts, attitudes and opinions of consumers, the trend of demand for certain products or services is also significantly influenced. In recent years, marketing with the help of opinion leaders has become increasingly popular, representing a specific type of social media marketing. The purpose of this scientific contribution materialized through my dissertation was based on the systematization of knowledge about the position and roles of influencers as opinion leaders in social media to identify the type, factors and intensity of their impact on consumer decision-making. the basis for comparing the knowledge from the results of global research studies and the online quantitative research study conducted by me. The survey findings showed that promoting some products through influencers may be more advantageous than others. Influencers will have the biggest impact when buying clothes, shoes, cosmetics and, surprisingly, services. Meanwhile, people rely heavily on other factors to buy food, jewelry and electronics, but it is not ruled out that marketing through influencers could affect them in the future.

In the context of the research carried out in this dissertation, it can be concluded that Internet technology has become a very important "communication channel" between supply and demand when it comes to influences and recommendations.

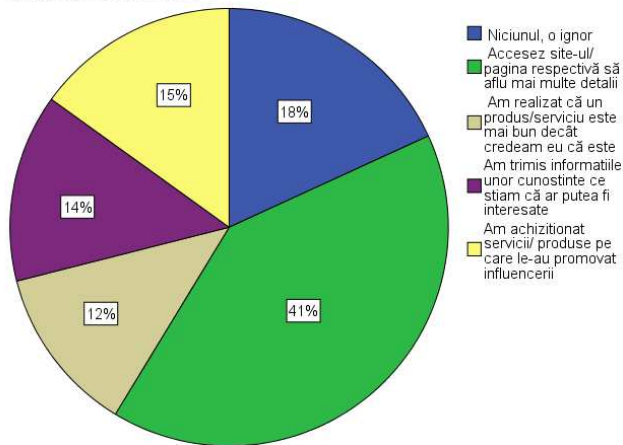
Given that respondents interact with influencer posts at a different frequency depending on the social network in which they operate, a correlation test was performed to identify those that are associated with both a level of credibility of respondents' content and with the predisposition to purchase the promoted product / service. Thus, following the statistical analysis, it resulted that a higher frequency of viewing influencer posts on Instagram is associated with a higher degree of credibility (correlation coefficient -0.306) but also with a higher possibility of conversion to purchase the promoted product / service. (correlation coefficient - 0.333) both at a 99% confidence level.

Another objective of the study was to identify the impact that advertising through influencers has on respondents, so the analysis showed that the majority of respondents, with a percentage of 41% enter the site of the product or service to find out more details, this being the most impactful action within them. The top is completed by the absence of a reaction, by ignoring, in a percentage of 18% of the respondents, so that 15% of the participants in the studies say that the resulting impact was the acquisition of the product / service promoted by the influencer.

At the opposite pole, the rarest action following the interaction with advertising through influencers is the awareness that a product / service is better than it was initially known about it, as shown in the below figure.



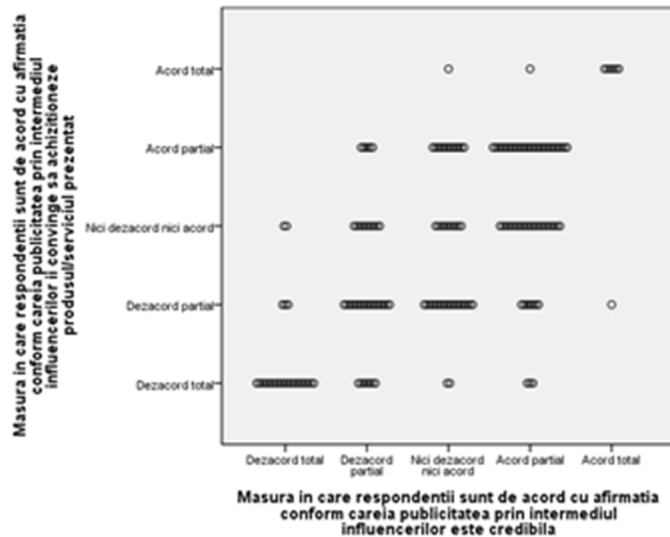
Fig. 3.4. Ce impact are asupra dumneavoastră publicitatea realizată prin intermediul influencerilor ?



**Figure 1.** The impact of advertising through influencers  
Source: SPSS analysis

Given the fact that there is an increase in the use of services and the purchase of products online, an important objective of the research was the identification of the preferred device by the respondents when making purchases of online tourism services. Thus, the data analysis showed that the majority of respondents, 63%, use the laptop as a favorite device for using the Internet.

The research aimed to highlight an important issue, namely the identification of a potential link between the extent to which respondents agree with the statement that advertising through influencers is credible and the extent to which they agree with the statement that this type of advertising convinces them to purchase the product / service presented. Through this test it can be identified whether the credibility is really associated with the predisposition to purchase and vice versa. Following the statistical analysis it resulted that between the 2 variables there is an average positive correlation with a Spearman coefficient of 0.614 at a confidence level of 99%.



**Figure 2.** The extent to which respondents believe that advertising through influencers is credible

Source: SPSS analysis

#### 4. Conclusion

In conclusion, influencers who promote products and brands have become part of consumers' daily lives. Influencers promote various products, such as clothing, footwear, cosmetics, but also services. Using marketing through influencers can bring many benefits to a brand, but most importantly, a positive impact on the sales of its products. However, consumers should not only be positively influenced, and companies that choose to use this strategy should also be aware of the risks involved in this approach, thinking that the respondents to this questionnaire did not put in the first place as the main reason for acquisition, the influencer who promotes the characteristics of the product / service.

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# THE EFFECTS OF SANCTIONS AND COUNTER-SANCTIONS ON TRADE BETWEEN CENTRAL AND EASTERN EUROPEAN COUNTRIES AND RUSSIA

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**Abstract:** *The year 2014 marked the deepest crisis in EU-Russia relations since the dissolution of the Soviet Union. The bilateral relations cooled down because of the Ukrainian conflict. The EU started to impose restrictive measures on Russian Federation and Russia has responded by imposing counter-sanctions. The sanctions imposed by European Union in conjunction with the counter-sanctions adopted by the Russian Federation on EU food imports had massive consequences on the bilateral trade. The main purpose of this research is to identify and evaluate the impact of sanctions and counter-sanctions on trade in goods between eleven Central and Eastern European countries and the Russian Federation. This article tries to determine the factors that may explain why, after the adoption of economic sanctions, some Central and Eastern European Countries recorded losses higher than others. The research methodology combines tools of both quantitative analysis and qualitative analysis.*

**Keywords:** *European Union, Russian Federation, economic relations, economic sanctions*

**JEL classification:** *F10, F50, F51*

## 1. Introduction

The year 2014 marked the deepest crisis of the relations between the EU and Russia since the dissolution of the Soviet Union. The bilateral relations cooled down as the conflict in Ukraine evolved. The factor triggering the political crisis was the suspension by the Ukrainian government of the preparation process for signing the Partnership Agreement between Ukraine and the European Union in November 2013. It followed the Vilnius Eastern Partnership Summit, where the Ukrainian president at that time, Viktor Yanukovich, refused to sign the partnership agreement with Brussels. The decision of the Ukrainian government and the refusal of the president generated protests in the centre of Kyiv. Though at first considered as insignificant, the demonstrations turned into mass manifestations and extended in several towns of Ukraine. The situation further escalated and the following events: the removal of the Ukrainian government from power, the referendum in Crimea and the annexation of the peninsula to the Russian Federation, the military conflict in the Donbas region have increased even more the tension between the Russian Federation and Occident.

## 2. Research objectives and methodology

The aim of this research is to identify and evaluate the impact of sanctions and counter-sanctions on bilateral trade between EU member states from the Central and Eastern European region and the Russian Federation in the period 2014-2019. The

practical purpose of the investigation consists in determining the factors that may explain why the restrictive measures had a different impact on the countries in this region and on their interaction with Russian Federation.

The term Central and Eastern European Countries (CEECs) has several definitions. That's why it is important to clarify that in the context of this paper, the term Central and Eastern European Countries refers to the definition given by the Organization for Economic Cooperation and Development, except Albania which is not an EU member state. Therefore, in this research, the term Central and Eastern European Countries refers to the group of countries including Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia and the three Baltic states: Estonia, Latvia and Lithuania.

The research methodology combines the specific tools of quantitative analysis with that of qualitative analysis. In order to achieve the proposed objectives, the information collected from official documents (reports of the European Commission and the European Parliament), academic articles and studies conducted by various prestigious think-tanks (European Parliamentary Research Service (EPRS), Centre for European Policy Studies (CEPS), Centre for European Reform (CER), The Vienna Institute for International Economic Studies (wiiw), etc.) were analysed. Also, the research relies on a consistent database disseminated by the EU Statistical Office - Eurostat. As a result of accessing Eurostat databases, statistical data on trade in goods between Central and Eastern European Countries and the Russian Federation for the period 2010-2019 (quantity, value of imported and exported goods) were collected and processed. The structure of imports and exports of goods was also analysed by using the Standard International Trade Classification (SITC). The main sectors of this classification system are: food and live animals; beverages and tobacco; crude materials, inedible (except fuels); mineral fuels, lubricants and related materials; animal and vegetable oils, fats, waxes; chemicals and related products; manufactured goods classified chiefly by material; machinery and transport equipment; miscellaneous manufactured articles; commodities and transactions not classified elsewhere.

### **3. Previous research on effects of EU sanctions and Russian counter-sanctions**

Studying the specialised literature that approaches the topic of restrictive measures imposed by the European Union against the Russian Federation, it has been determined that, up to the present, two research directions have been identified. Some authors (Gurvich, E., Prilepskiy, I., (2015); Ilina E. (2015); Russell M. (2018), analysed the efficacy of the sanctions imposed by the EU, referring only to the impact they had on the economy of Russia. Others (Dolidze T. (2015); Bond I., Odendahl C., Rankin J. (2015); Giumelli (2017); Oxenstierna (2018)) preferred to build a clearer picture, examining the costs borne by the EU following the adoption of sanctions.

The report prepared at the request of the European Parliament's Committee on International Trade (DG EPPD (2017)) presented the effects of the restrictive measures on Russia's economy, as well as the way in which sanctions have affected the EU member states. Dolidze (2015) declared that the economic sanctions had a boomerang effect, so the restrictive measures adopted by the European Union combined with Russia's embargo on food imported from EU countries created a situation of loss for all economic participants involved, including EU. Giumelli (2017) analysed the effects of the restrictive measures applied referring to each country separately, not on the level of the entire European Union. The author noted that after the adoption of restrictive measures, all EU countries saw a reduction in their exports

to Russia, but not all 28 countries felt the negative effects equally. The same idea was shared by several authors. Oxenstierna (2018) pointed out that the EU operates uniformly when imposing restrictive measures, but the consequences of these sanctions and counter-sanctions vary considerably from one Member State to another. Bali (2018) highlighted the distributive impact of sanctions, emphasizing that some EU Member states were more affected than others. Havlik (2019) stated that the economic effects on individual EU countries vary according to their exposure to the Russian market. Kutlina-Dimitrova (2017) analyzed the effects of the Russian embargo on trade between the EU and the Russian Federation and found that these restrictive measures did not have a major influence on the total EU exports, but there were some categories of products were more severely affected than others: fruit and vegetables, dairy products and some types of meat.

Based on the conclusions of the authors presented above, this article tries to determine the factors that may explain why after the adoption of economic sanctions, some Central and Eastern European Countries recorded losses higher than others.

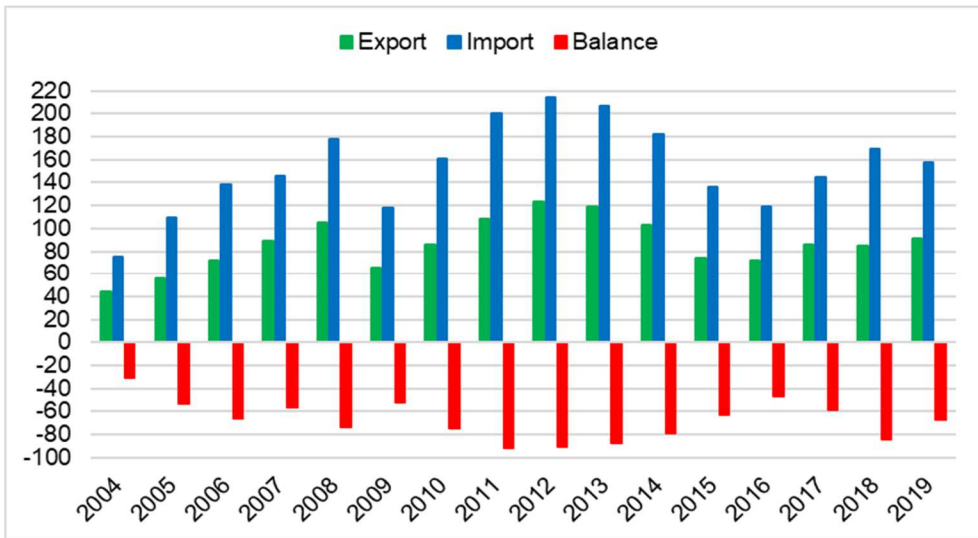
#### **4. EU sanctions and Russian counter-sanctions**

In March 2014, the leaders of the European Union condemned the actions of Russia in Ukraine and imposed the first restrictive measures against the Russian Federation. The EU imposed diplomatic measures, individual restrictive measures (asset freezing and travel restrictions), restrictions on economic relations with Crimea and Sevastopol, economic sanctions and restrictions on economic cooperation. The economic sanctions imposed by the European Union targeted the exchanges between the EU and Russia in various sectors. These restrictive measures limited the access for certain Russian banks and companies to EU primary and secondary capital markets and did not allow any forms of financial support and intermediation in favour of the Russian financial institutions. Restrictive measures also prohibited the import, export and direct or indirect transfer of all defense-related materials, as well as dual-use items that could be used for military purposes or used by Russian military end-users. The sanctions curtailed the access of Russia to certain sensitive technologies and services that can be used in the Russian energetic sector, for instance, in oil production and exploration. (European Council, *EU restrictive measures in response to the crisis in Ukraine*). In turn, Russia took retaliatory measures materialised in an import ban on agricultural and processed food exports from the EU. There was also a ban on the imports of meat and meat products, certain kinds of fish and related products, milk and dairy products, certain fruits and vegetables from the EU. All restrictive measures, both those applied by the European Union and the counter-sanctions adopted by the Russian Federation, are constantly reviewed and are subject to periodical renewals.

#### **5. Trade between Central and Eastern European Countries and Russia**

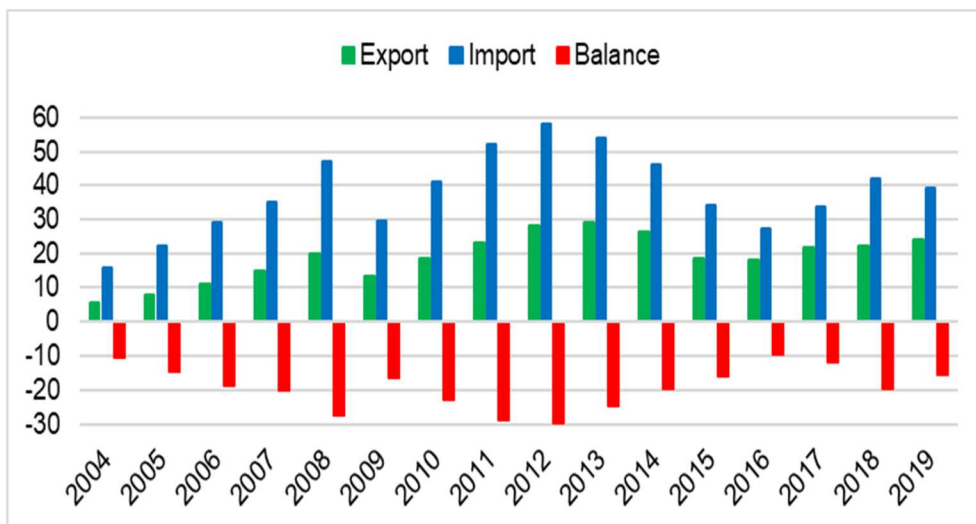
Analyzing the statistical data, it can be stated with certainty that the exchange of goods between the European Union and the Russian Federation has an asymmetric character. The economic sanctions have negatively influenced the trade between the EU and Russia, but have not changed its structure. The most important products exported from the EU to Russia were and remain the finished products such as: machinery and transport equipment, chemicals and medicines and other manufactured products, while the imports are concentrated on raw materials, especially energy resources: natural gas, oil, fuels and coal. The same structure is

also present in the trade of products between the Russian Federation and the EU member states from Central and Eastern European region.



**Figure 1:** EU-Russia trade in goods, billion €  
Source: Author's projection using Eurostat database (2021)

The results obtained from processing the data on the evolution of trade between the EU and the Russian Federation, showed a decrease in the volume of bilateral trade in the 2014-2018 period, compared to the 2010-2014 period (see Figure 1). The same trend can be noticed in regard to trade between CEECs and Russia (see Figure 2). Between 2014-2016, besides the restrictive measures adopted by the EU against Russian Federation and the counter-sanctions adopted by Russia, the evolution of bilateral trade flows was also influenced by the reduction of oil prices, which, in turn, caused the depreciation of the Russian rouble. Though such circumstances cannot be ignored, the aim of the paper is not to separate the effects of sanctions and counter-sanctions from the consequences of other factors, but to analyse the evolution of imports and exports of goods during the period 2014-2019, the time interval during which the restrictive measures were applied. Poland, followed by Lithuania and Czech Republic are the states with the highest exports to Russia. On the other side, the top importers are Poland, Lithuania and Hungary.



**Figure 2:** Trade between CEECs and Russia, billion €  
Source: Author's projection using Eurostat database (2021)

## 6. Conclusions

The analysis of the historical data contributed to the discovery of several factors that can explain why the restrictive measures had a different impact on trade in goods between Central and Eastern European Countries and the Russian Federation. To begin with, some countries have suffered more because of their geographical location. Being geographically close to the Russian Federation had led to a more intense bilateral trade. Following the sanctions, those countries incurred the higher losses. Another finding of this research is related to how each country applied the restrictive measures against Russia. In addition, the structure of exports and imports determines the existence of differences. Countries, in the export structure of which, the products affected by sanctions and counter-sanctions, such as double-use technology and agricultural products, had a higher share, suffered higher losses. Machinery and transport equipment is the most important category of goods exported by the EU Member States from Central and Eastern Europe to Russia, and countries with a high share of machinery in the structure of exports have experienced substantial losses. Countries that had a high share of food in their exports were affected significantly due to the embargo imposed by the Russian Federation on food imports from the EU. Countries with relatively high levels of chemicals, raw materials and beverages in their exports suffered lower losses, since these categories of goods were not directly affected by either the EU's economic sanctions or Russia's embargo on food products imported from European Union countries.

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## THE DRIVEN FACTORS OF THE ECONOMIC COMPETITIVENESS. A LITERATURE REVIEW

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**Abstract:** *The Economic Competitiveness is a term which has a significant importance in the welfare of a country and also in the development of a company. A simple definition says that competitiveness is the ability of a state or even a firm to put in the market products and services that have a high quality and, in addition, are competitive with others in terms of price; being able to bring some profit after covering all the expenses appeared in the production process. The main objective of this paperwork is to emphasize which factors drive the evolution of the economic competitiveness nowadays. As we will see, it is influenced both by internal factors – in a microeconomic perspective, as well as by external factors – in a macroeconomic point of view, factors such as: division of labour, specialization, assets (resources), processes and institutions and government policies. The study is based on the specialized literature in the economic field, precisely the one which influence the economic competitiveness.*

**Keywords:** driven factors of the economic competitiveness; economic competitiveness; international competitiveness; determinants of competitiveness; competitiveness.

**JEL classification:** B27; F14; O47.

### 1. Introduction

We live in a world that promotes globalization and day by day more companies extend their reach beyond the borders of their own national countries. However, there are still many cultural differences from a nation to another and the competition is strong, so a firm must adapt to multiple changes in order to survive in the market or expand its reach to new ones.

A simple definition says that competitiveness is the ability of a state or even a firm to put in the market products and services that have a high quality and, in addition, are competitive with others in terms of price; being able to bring some profit after covering all the expenses appeared in the production process.

Taking into account the above considerations, the aim of the present paper is to identify and analyze the main factors that drive the economic competitiveness across the globe.

The paper is organised as follows: general literature review on the subject of driven factors of the economic competitiveness, the explanation of some of the most common and important factors, and, in the end, a series of conclusions regarding the driven factors of the economic competitiveness.

### 2. The Driven Factors of the Economic Competitiveness

The factors which influence the level of competitiveness mostly consist of price, quality, logistics and image. Furthermore, the machineries and other technologies, as well as the human know-how, represents the competitive advantages.

“From a macroeconomic perspective it looks at the drivers of a location’s rate of underlying trend growth. The perspective taken is focused on the medium-to long-term: how strong are the underlying fundamentals, and how can they be improved? Wages and costs are in this view assumed to revert ‘automatically’ to their equilibrium levels. This definition is important for organizations like competitiveness councils that are supposed to focus on long-term growth and prosperity rates. Countries that are losing competitiveness in the sense of slowing productivity dynamics are seen to be exposed to a deteriorating prosperity performance. The literature on growth spurts has shown that the level of sustained productivity growth is what ultimately matters, not the stability or variability of growth rates itself.” (Ketels, 2016).

As we can see in Table 1, the Economic Competitiveness is influenced by internal factors – in a microeconomic perspective –, as well as significant external factors – from a macroeconomic point of view.

**Table 1:** Determinants of competitiveness found in empirical research

<b>Determinants</b>	<b>Authors</b>
Division of labour, specialization	Classical economics: Smith (1776)
Investment in physical capital	Neoclassical theories: Schumpeter (1950) Swan (1956)
Assets (resources)	Horne et al. (1992) Barney, Hansen (1994) Carney (1998) Khalil (2000) Barney et al. (2001) Nivievskiy, von Cramon-Taubadel (2008) Zhang (2013)
Processes	O’Farrell, Hitchens (1988) Porter (1990) Kanter (1993) Reeves, Deimler (2011) Altomonte, Ottaviano (2011)
Institutions and government policies	Andr�n, Oxelheim (2002) Nivievskiy, von Cramon-Taubadel (2008) Gulati et al. (2013)

Source: Siudek, T., Zawajska, A. (2014), p. 101-102

### 3. Division of labour, specialization

The Specialization refers to the concentration of resources and work in a specific area or field, which gives the best results. It is a very profitable technique not only in terms of money, but also when we talk about the time invested in the process and the expertise of different workers.

Taking the last element into consideration, the expertise, we have the Division of Labour. This strategy is going hand in hand with Specialization, because, after we choose the area in which to put all of our financial and physical efforts, it is important to break down the actual work in multiple tasks. This way, every worker does whatever is good at.

While Specialization may be used in all kinds of activities, Division of Labour is mostly known for its contribution to the sectors with mass-production – assembly lines. In this concept is perfect if everyone does a simple job, being considered that there is no need to complicate things. Being capable of understanding a part of the total work may reduce costs in a long run, because the work becomes more efficient.

#### **4. Investment in physical capital**

The investment in physical capital is one of the main three factors of production, together with land and labour. It consists of assets, such as the building of a company or the vehicles and machineries used to facilitate the process of production. Their principal characteristic is that assets are fixed capital, which means they cannot be consumed during the production of the merchandise (goods and services).

Also, it is very important to mention that the value of the physical capital may vary over time, because it tends to depend on every change that happens within the organization (not necessarily big ones) and even on the fluctuations of the prices in the market.

#### **5. Assets (resources)**

According to some specialists in the economic field, the assets of a country or even a company are those which influence the output and, furthermore, the level of competitiveness of that particular entity in relation to others.

We have to agree with them at least in a partial way, because we cannot really produce anything if we do not have resources. In order to have an output, it is necessary to provide an input.

#### **6. Processes**

A process is „a systematic series of actions directed to some end“; „a continuous action, operation, or series of changes taking place in a definite manner“. (Online Dictionary).

It is true in some way, exactly as in the case with the resources. We cannot sell a product if we do not put the resources (assets) through a complex process of production and other stages. Sometimes it is an entire procedure and other times everything happens quite easy, it depends on the products or services involved. However, regardless of the details of production, there is always a process involved. The processes may be: strategic management (for example, competencies and quality, flexibility and adaptability), human resources – from workforce mobilization to brain drain and brain gain, technological innovations, actual manufacturing and even marketing campaigns. (Siudek and Zawojka, 2014).

#### **7. Institutions and government policies**

The institutions and government policies are a sensitive point in the Economic Competitiveness sphere. This happens because the government of a country has permanently the power to introduce some policies or regulations that may affect the companies.

There are two possible outcomes when the government and other influential institutions apply policies which impact the economy: they could add taxes or some regulations in order to favour the national production or break them down in order to increase competition (between local businesses or international players). Considering the fact that most of the countries have an important tendency toward globalization nowadays, the second option is more applicable and viable. However, taking into account this information, we can affirm without any doubt that the state institutions and government policies are directly involved in Economic Competitiveness.

## 8. Conclusion

The study highlights that economic competitiveness is influenced by many factors, such as division of labour, investment in physical capital and institutions and government policies.

Although the traditional theory of comparative advantage controlled global trade thinking for a long time, it is now regarded as an insufficient justification for firms' competitive advantage in today's business climate.

Because competitiveness is a complicated notion shaped by a multitude of factors, it appears that utilizing multiple or mixed indicators (indexes) of competitiveness is the most relevant technique to estimate its level.

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# AN ANALYSIS OF THE DYNAMIC TRADE EQUILIBRIUM OF THE FOREIGN COMPANIES HAVING LUCRATIVE ACTIVITIES IN ROMANIA DURING THE PERIOD 2014-2020

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**Abstract:** *Foreign direct investment (FDI) has been established for several decades as one of the most important determinants of development and, as such, policies to attract foreign investors have advanced on the agendas of Romanian public policy makers. More and more analysts have dealt with the spillover effects that the subsidiaries of foreign companies generate at macro, meso and microeconomic level, the most frequently analyzed being: new jobs, new investments, increasing of the technological intensity and helping companies from host countries to integrate in global value chains. In the current paper the authors investigate the impact of the activities carried out by the companies operating in Romania on the balance of its trade balance based on data from the annual reports of the National Bank of Romania. The analysis demonstrates that besides the spillover effects they generate in the economy, the multinational enterprises (MNEs) generate surplus for Romania.*

**Keywords:** external trade; trade balance; commercial dynamic equilibrium; spillover effect; FDI impact; multinational enterprises.

**JEL classification:** F19, F21

## 1. Introduction

The FDI inflows in Romania registered a positive evolution beyond expectations especially after the 2000 years, due to starting the negotiations in order to become a North Atlantic Treaty Organization (NATO) and European Union (EU) member. The attractiveness of Romanian economy for FDI has raised as the two very important events confirmed the political, economic and social stability of the state, joining a functional market economy and rule of the law orbit (Zaman et al., 2018).

Most of the studies in the FDI field confirm the positive effects of FDI in economies. Horobet and Popovici (2017) consider their most important contributions and opportunities being as follows: a complementary source to the public funding sources needed for the economy development, new jobs not only in the host country but also in the upstream stage of the value chains, a transfer of technology, knowledge and organizational behaviour which increase the competitiveness and efficiency, a long term stability as most investors will have a strong interest in the host economy, even in crisis periods.

Comes et al. (2018) performed an empirical study in order to investigate the impact of FDI and remittances on economic growth of seven countries from Central and Eastern European Countries. The authors demonstrate that among the states analysed, the highest influence of FDI on the economic growth is registered in Romania and also as regarding the remittances, Romania holds second position.

## 2. The impact of FDI on the external trade of Romania

There are several motivations that can drive an investor to relocate his activities in a foreign country, namely resource-seeking, market-seeking, efficiency-seeking and strategic asset-seeking FDI. The experts agree to the allegation that in Romania the resource-seeking motivation prevail and as a consequence, the MNEs with FDI are developed with the purpose of using the low costs so that the goods or services are exported back the home countries. All operations will cost less money and also Romania benefits as the exports increase. The impact of FDI on the exports in the manufacturing and services sectors measured by Popovici (2018) in the new EU members states (MS) against the old ones demonstrates that the new members benefited more from the FDI, as follows: in the *manufacturing* sector, for the new EU MS, a 1% increase in FDI leads to a growth in exports from 0.18% to 0.21% in the following year and for the old MS, the range is from 0.12% to 0.216%; in the *services* sector, a 1% increase in FDI leads to a growth in exports in the new EU MS from 0.14% to 0.19% and for the old EU MS, the impact is far lower, with a range between 0.05% and 0.14%.

Mudiyanselage, Epuran and Tescasiu (2021) show that the casual link between the FDI and trade openness in Romania is unidirectional, the direction of causality being from the investments to the openness. Albulescu and Goyeau (2019) reached to the conclusion that there is a complementarity effect between trade and FDI, which applies especially for the outward FDI.

Considering the increasing trade openness of the Romanian economy revealed by all empirical studies in this area, the share of the MNEs in total exports and imports of goods and services has an important influence on the impact of FDI to the external trade of Romania.

## 3. The contribution of the MNEs to the trade equilibrium of Romania

The FDI net inflows registered a positive evolution within the examined period, raising with 113.67% in 2019 compared to 2014, as illustrated by Table 1. We excluded year 2020 from the analysis due to the pandemic situation which occurred already in February. In this section we will try to find out if there is a positive or negative contribution of MNEs to the trade balance of Romania.

**Table 1:** FDI inflows in Romania, during the period 2014-2020

	2014	2015	2016	2017	2018	2019	2020
FDI net inflows (mil. EUR)	2421	3461	4517	4797	5266	5173	3005

Source: National Bank of Romania

**Table 2:** International trade of MNEs in Romania during period 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Share exported goods by MNEs / total exports of goods (pp)	70.9	69.4	74.0	73.4	75.0	74.2	72.9
Share imported goods by MNEs / total imports of goods (pp)	64.7	62.8	66.3	66.0	68.2	68.2	66.5
Trade balance of goods (mil. EUR)	-655	-1865	-2092	-3438	-5158	-6792	-7490
Manufacturing Industry (mil. EUR)	6292	6852	7862	8210	8069	8392	7987
Trade (mil. EUR)	-6859	-8196	-9171	-11027	-12531	-14218	-14584
Other activities	-88	-521	-783	-621	-696	-966	-893
Share exported services by MNEs / total exports of services (pp)	51.0	55.1	58.8	53.0	52.7	49.9	53.0
Share imported services by MNEs / total imports of services (pp)	51.2	56.9	59.9	48.0	47.5	41.7	48.0
Trade balance of services (mil. EUR)	2975	3556	4388	4988	5312	5825	5728
Services of manufacturing (mil. EUR)	1551	1720	1855	1943	1894	1800	1353
Transport (mil. EUR)	791	996	1094	1131	1005	1078	791
IT&C (mil. EUR)	1053	1227	1631	1931	2372	2932	3239
Other services for business (mil. EUR)	310	660	552	685	904	483	759
Other services (mil. EUR)	-730	-1048	-744	-702	-863	-468	-414
Trade balance of MNEs - goods and services (mil. EUR)	2320	1691	2296	1550	154	-967	-1762

Source: authors' calculation based on National Bank of Romania annual reports

From the Table 2, we can notice the high importance the MNEs for the international trade of Romania, the share of exports and imports realized by the respective companies varying between 49.9% and 75% for exports and between 41.7% and 68.2% for imports.

The sectors where the FDI have led to a surplus are: the manufacturing industry, with an increasing net contribution of 8392 million EUR in 2019 and a continuous raise except the year 2020; the tertiary sector in general among which the services of goods manufacturing, where the surplus had a sinusoidal evolution between 1353 million EUR and 1943 million EUR; services of transport with a static contribution around the value of 1000 million EUR (the standard deviation for the selected period is only 140 million EUR); IT&C with the most favourable and significant evolution, from 1053 million EUR in 2014 to 3239 million EUR in 2020; other services for business, ranged between 310 mil. EUR and 904 mil. EUR.

The sectors where the MNEs registered deficits in the analysed period are: trade, with the biggest deficit recorded in absolute amount, reaching -14584 mil. EUR in 2020, a raise of 112.6% compared to the value of 2014; other activities undertaken for producing goods with a deficit varying from -88 mil. EUR to -966 mil. EUR and other services, ranged between -1048 mil. EUR and -414 mil. EUR.

#### 4. Conclusion

The effects of the lucrative activities of foreign companies on the Romanian economy must be analysed on various time horizons (short, medium, long) depending on the panel of factors that influence them.

During the selected period our analysis demonstrates the MNEs recorded a surplus of 5282 million EUR, therefore they had a positive contribution to the trade balance of Romania. Although the surplus realized by the MNEs investing in the tertiary sector surpassed the deficit recorded in the primary and secondary sectors during the period 2014-2018, years 2019 and 2020 show a negative trade balance. The negative evolution of the trade balance started with year 2018 and further research could be performed in order to identify the determining factors.

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## SOCIO-DEMOGRAPHIC FACTORS INFLUENCING ENVIRONMENTAL BEHAVIOUR

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**Abstract:** *In the context of worsening environmental problems and changing consumer behaviour, researchers' interest in the study of environmental attitude and behaviour has dramatically increased. As a growing number of citizens are becoming more eco-conscious in their preferences and purchases of products, it is essential to identify the factors that influence this shift. In recent years, there has been a significant increase in studies concerning consumer environmental attitude and behaviour, with many researchers exploring the various factors that can impact on this behaviour. Therefore, based on current literature on the subject, the aim of this study is to identify and analyze the socio-demographic factors that influence pro-environmental actions. The main consumer characteristics discussed are age, gender, level of education and income. Taking into consideration the exploratory nature of this research, the study contributes to the current state of knowledge by showing the roles that socio-demographic factors can play in the buying and consumption process.*

**Keywords:** pro-environmental behaviour, green consumers, socio-demographic characteristics

**JEL classification:** M31

### 1. Introduction

Environmental behaviour reflects all those actions that an individual might take due to awareness to environmental problems, for example energy saving or buying green products. The topic of environmental behaviour has become very popular, especially studies concerning the profiling of green consumer segments. They represent the focal point of green marketing research because people's consumption decisions can contribute to the destruction or protection of the environment. Many researchers have tried to identify organic or environmentally conscious consumers through a wide range of demographic, socioeconomic, and psychographic characteristics (Diamantopoulos et al., 2003) or to predict patterns of ecological consumption based on declared consumer intentions (Han, Hsu and Sheu, 2010). As a result, studies have shown that there are many factors that influence ecological consumption behaviour, such as culture or social context, personality, psychological values including attitudes, lifestyle or environmental knowledge, demographic characteristics, price and perceived quality of products, reputation of the company, or the credibility of marketing communication (Mostafa, 2007).

According to Schlegelmilch, Bohlen and Diamantopoulos (1996:36), “the measures used to profile environmentally conscious members of the population can fall into two distinct categories: socio-demographics, such as sex, age, education and social class, and personality measures, such as locus of control, alienation, conservatism, and dogmatism”. In the present study, based on current literature on the subject, the main socio-demographic factors that influence pro-environmental actions are analyzed and discussed. Understanding these factors is essential for building a complete picture of the green consumer.

## **2. Literature review**

Socio-demographic characteristics can affect ecological attitudes and behaviour. Age, gender, level of education and income are some of the most significant variables that can explain why a consumer may or may not choose to engage in various types of environmental behaviour. These four factors are discussed in more detail below.

### **2.1. Age**

Age has been reported as a significant factor affecting consumer environmentally friendly attitudes and behaviour. For example, many authors have found a significant relationship between age and organic food consumption and buying. According to van Doorn and Verhoef (2011:176), “younger people are more likely to be environmentally friendly”. This finding was confirmed by Singh and Verma (2017:480), who found that “young consumers in the age group of 31-40 years are buying more organic food products than any other age group”. Arnold (2009:224) recommends that “marketers focus their attention on the coming generation, because is the first generation that has had so much information and can wield enormous power and influence”. Ethical values seem to be deeply incorporated into this generation’s lifestyle, as they grew up during a period when the impact of humans on the planet and other species became increasingly visible. On the other hand, Tsakiridou et al. (2008:160) argued that “young people (18-30 years old) are more environmentally conscious but less willing to pay more due to their lower purchasing power, whereas older people are more health conscious and more willing to pay an extra price for organic food”. Tsay (2009) confirmed this finding, highlighting that older buyers are more likely to buy and pay a premium price for green products, due to higher financial resources.

### **2.2. Gender**

When it comes to gender and green consumption behaviour, women seem to be more interested in green products compared to men, and also more likely to buy them (Han, Hsu and Lee, 2009). This finding seems to apply also to the Romanian market, as Roman et al. (2015:6409) confirmed that “women are a key target for greener products and often make purchases on behalf of men”. Other international studies confirmed that “women may have a more positive attitude toward organic products and be more concerned with environmental topics” (van Doorn and Verhoef, 2011:176).

This tendency can be explained by “the social role theory that females tend to be more responsible and obedient and that males tend to be more self-reliant and aggressive” (Han et al., 2009:521). These findings demonstrate that firms should consider the gender of consumers when developing green marketing strategies. Bhutto et al. (2019:612) recommends that “managers and marketers target women through their advertising campaigns, educational activities such as special workshops related to mother/child and offer special discount or free services”.

### **2.3. Level of education**

Education is another socio-demographic factor that can play an important role in shaping green consumption. One study concerning Greek consumers found that “higher-educated people are more likely to express positive attitudes towards organic products; require more information about the production and process methods of organics; have the confidence to negotiate conflicting claims in relation to organic food; and are more willing to pay a premium for organic food” (Tsakiridou et al., 2008:160). This result was confirmed by Singh and Verma (2017), who found that consumers with a higher level of education are more likely to buy green products compared to those lower-educated. One possible explanation for these findings is that “the more educated can better understand complex environmental issues, and hence are more concerned with environmental quality and more willing to participate in green consumer behaviour” (Zhao et al., 2014:148).

### **2.4. Income**

Income is another demographic variable that seems to be positively correlated with green attitudes and behaviour. According to Akehurst, Afonso and Goncalves (2012:976), “income was always perceived to have a positive relation to green consumer behaviour due to the general assumption that most green products have higher prices than conventional ones”. Other studies have yielded similar findings, highlighting that higher income citizens are more likely to buy and consume green products (Singh and Verma, 2017). At the other end of the scale, consumers who have a less favourable financial situation and fewer economic capabilities, “tend to focus more on immediate base needs for their families and the household, and do not seem to prioritize environmental aspects” (Groening, Sarkis and Zhu, 2017:25). When it comes to Romanian consumers, Roman et al. (2015:6409)’s study revealed that “the best green customers are people with more money to spend”.

## **3. Conclusion**

Studies regarding green consumers have revealed that there are a number of factors that shape individual consumption and buying habits on a daily basis. Due to constraints regarding page limit, this study discussed only socio-demographic factors. Therefore, future studies should investigate other drivers of citizens pro-environmental behaviour, for example socio-cultural, situational, or psychological influences. There are also other socio-demographic factors that are not covered in this paper but can have a positive impact on green consumption and buying behaviour, such as presence of children in the household or marital status.

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## DIGITAL TRANSFORMATION FOR TOURISM SME

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**Abstract:** *The objectives of the paper are none other than the perspective of transforming tourism SMEs in through digitalization. With the help of digital devices, we can achieve the modernization of the digital infrastructure through the interaction between consumers / tourists and tourist companies in Europe. The present study puts under scrutiny the public actors who analyze the conditions of competition between the old and the new operators on the market in the desire to maintain a fair competition, at the same time ensuring the neutrality and transparency of the data provided to the final consumer. In conclusion, tourism mobility through Europe should be promoted through digital information services. Access to data provided by operators must be accessed by promoting open data policies for the implementation of digital services.*

**Keywords:** digitalization, technologies, digital transformation;

**JEL classification:** L83, M21, Z32.

### 1. Introduction

The first information about the digital economy comes from a period when the data coding technique referred to computer programming and analog information transmission.

Alain Touraine (1969) and Daniel Bell (1973) wrote two papers on "post-industrial society". They bring to the fore the idea that the world will be dominated by intangible production and consumption, based on information processing and dissemination.

The information being explained as "storage, transmission and processing of data as a basis for all economic and social exchanges" (Bell, 1973).

Since then, the interest of international institutions for the analysis of the information economy and for the major impact on society has increased.

In order to create more and more jobs, European Commission propose several options for increasing the competitiveness of tourism companies and also for integration into the global digital sphere.

Launched in 2015, the digital tourism network was made to discuss opportunities, provoking good tourism practices in order to stimulate tourism entrepreneurs, especially the SMEs. This network will help the integration of SMEs in tourism in order to digitally transform the tourism industry. In 2016, with the help of this specific network, The European Commission conducts a consultation on the opportunities and challenges of digitalization of tourism. Following the processing of 3000 responses of tourism companies, associations and public authorities at local, regional and national level, it was synthesized in two reports that appear on the virtual tourism observatory in 2016 and 2018. The digital transformation in tourism often has unpredictable directions, although digital marketing and e-commerce are spreading to new markets,

succeeding in building new brands and attracting new customers. Regardless of the size of a tourism enterprise, digitalization has extremely important implications.

## **2. Digitalization is the future in tourism business**

Digitalization leads to economic and social transformations. For SMEs to integrate into digital ecosystems, this digitalization must lead to the penetration of SMEs into new markets and then lead to the development of new services and products. Tourism SMEs, in order to survive, need to invest in digitalization, making them remain competitive in the market. We can define digitalization as a transformation of tourism business models, as an integration of SMEs in global chains and ecosystems.

We have 3 basic themes:

- the mode in which digitization reshapes the way tourism business operate
- completely new models that depend entirely on emerging technology
- political approaches in order to provide support for the digitalization of SMEs in tourism.

A successful business model requires a good business architecture, a good relationship but external entities and the ability to capture value. If we talk about a value chain, following the way in which companies with the support of the government and civil society access resources, adding value to products and services that can then be cleared more easily. In global ecosystems, we have a fluid and dynamic system of technology-mediated interactions, between suppliers and consumers of products and services in tourism.

The tourism sector includes tourism enterprises that carry out activities on a local, regional and global level. The geographical distribution of business is limited only by the accessibility of destinations and their attractiveness. A good example of increasing the visibility of tourism SMEs on the online market are travel agencies that have largely managed to connect in real time on the digital market, promoting their products and services, attracting consumers and making significant sales. Now, the new wave in tourism is represented by automation and robotics. What people used to do, now they do chatbots and automated systems. A digital economy comes with major opportunities for tourism SMEs. Among these opportunities, we mention the access to new markets, the improvement of the performances but also of the competitiveness. For these tourism companies we are talking about access to global markets and knowledge networks, all at a reduced price.

Digitizing SMEs in tourism seems to be a major challenge given that small businesses have limited resources. Advances in technology are proving to be a real help for the tourism sector. When we talk about innovations in tourism, we are talking about innovations in business management technologies that produce innovative services and experience in tourism. When we talk about the progress that SMEs in tourism should make, we are talking about:

- Cloud technology that allows you to manage your business from anywhere as long as they have high speed internet.
- Chatbots that help customers search the internet.
- Technologies that allow digital check-in, concierge, etc.
- Voice assistants.

Chatbots are now used by a lot of companies because they are able to answer customer questions and take orders from comments and Facebook Messenger and integrate with all major payment systems. Connecting ads to the company's chatbot is recommended, because in this way consumers will have a more personalized experience (Ban, 2020).

### 3. Digital transformation for tourism SMEs

We have countless examples of successful digital businesses operating in tourism and which are considered technological start-ups. We mention here booking.com and Uber. These technology-based digital giants have the ability to attract capital on a global scale, unlike traditional tourism SMEs that have lower capacities in terms of growth trajectory. Because SMEs and micro-enterprises in tourism have a lower level of digitalization, this affects their visibility. Adaptation to the digitalization of tourism SMEs must be done, so we need digital infrastructure, high speed internet and wi-fi networks.

Tourism SMEs face a lack of capital reserves, with difficulties in accessing loans or borrowings, so it is very difficult for them to invest in digital technology. Successful business models, good practices and various strategies are what encourage the opening of SMEs in tourism to their digital transformation. In most cases, tour operators and travel agencies act on two levels. On the one hand they have their own website and use social networks, and on the other hand they offer services and products on global platforms.

In this way, tourism SMEs can go to large markets by accessing global data and value chains. digitalization involves the transformation of traditional business practices, transforming marketing, management and at the same time the development of new profuse and service delivery. In business ecosystems, companies pursue two-dimensional digitization:

- find out more about customers and the market
- to use technology in the digital ecosystem.

There are 4 archetypes of the digitally improved business model:

- vertically integrated businesses

Multi sided ecosystems

- business with modular products/suppliers
- reseller business

The digital business model can help tourism SMEs consider the innovation of their business model: - knows the market – addresses several users - generate economies of scale by demand. Governments have an important role to play in the digital transformation of the tourism business. A good policy involves initiatives that encourage the conditions to increase the use of digital technology and in this way will encourage the participation of SMEs by overcoming barriers and taking advantage of all opportunities to move to digitalization.

We can distinguish three trajectories:

- actively supports the digital transformation of tourism
- encouraging the adoption and investments in new digital technologies
- encouraging the business model and ecosystem innovation

The services sector is one of the largest employment sectors in Europe, employing 90 million people and accounting for 68% of all employment (European Commission, 2016). It also accounts for 90% of job creation, and while new skills are in high demand, jobs tend to be of lesser quality (Valenduc & Vendramin, 2016).

Many urban, rural and regional communities in both Europe and Australia have a high degree of economic dependence on the services sector (e.g. tourism, transport, hospitality, personal services). The socio-economic transformations in employment, work, and working life in the services sector can open up opportunities, but also unleash negative impacts in these service centers.

Globalisation and technology have driven these transformations, which have developed outside or at the fringes of sovereign governments' regulatory reach (Aloisi,

2016). Markets, labour, employment, and work/non-work life are transforming quickly and governments have found it challenging to keep pace and respond as quickly as needed (Schmid-Drüner, 2016). Several studies have revealed that inclusion and equity are issues, with women less likely to be employed in professional roles (e.g. programmers), and less likely to secure equivalent conditions compared to their male counterparts (Degryse, 2016; De Stefano, 2016).

#### **4. Digitization of Romanian tourism**

The sites that increase the level of competitiveness, by promoting internationally romanian destinations have three target groups: tourists, destinations and industry. Local entrepreneurs, especially those from rural areas, enjoy these platforms because they offer them multiple possibilities in accessing markets, but especially in financial inclusion.

All market players must work together for the digital platform to bring real benefits. This should be the watchword in order to integrate the 3 major categories. tourists, destinations and industry.

Tourists will have the most reliable and current source of information, and Destination Management Organizations will upload and provide updated data, this being their primary obligation.

But the industry is the working connection with the authority, the ministry to which it belongs, through various links where the authorization, classification, data reporting and many others enter.

The purpose of this site would be:

- promoting Romania regarding tourist destinations and services.
- creating the direct link between those who offer services and consumers of services (where information, reservations and requests for offers enter)
- making the integral platform available to tourists and tour operators
- then to increase the visibility of the domestic offer, increase the collaboration between market players, correct information of consumers and therefore their access to a wider market
- last but not least, the elimination of printed materials as tourist promotion and the digitization of all tourist promotion materials to Romania, reducing as much as possible the printing costs.

This is done by reducing the number of pages, by referring to the site for detailed information.

Recommended for Romania, it would be a national digital platform that would bring many benefits, due to the fast communication between the authorities and the tour operators. Collaboration between all market actors, local businesses, local and national authorities and international organizations. From the point of view of the European Commission, digitalization in Romania is very low in the public sector and is much lower than other European countries.

The purpose of this superior digitization would be: - to fluidize the communication between the authorities and the tourism operators;

- as well as automation and simplification of processes by minimizing bureaucratization.

#### **Conclusions**

It turns out that SMEs have great difficulty adapting to market conditions quickly. But the IT support portal for tourism such as "IT Tourism" and the "Tourism link" platform.



They are an unexpected help for SMEs in finding the opportunities offered by the digital sector. But there is a problem. The economic advantages of online distribution are not capitalized on in Europe, this fact being due to the European governments that do not support entrepreneurship enough and especially the solutions focused on technology.

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# FINANCIAL EDUCATION IN ROMANIA: THE ROLE OF MONEY ATTITUDE AND FINANCIAL SOCIALIZATION IN YOUNG POPULATION - A LARGE DATASET STUDY

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**Abstract:** *What makes us financially literate? Are parents to blame? Is it all about financial courses/training or are there any other factors involved?*

*This paper aims to examine the relationship between the level of financial education and a series of behavioural and attitudinal variables - financial socialization, financial experience, money attitude, childhood experiences, and family background.*

*The novelty of the investigation on a Romanian youth sample (N=2197) adds to a deeper understanding of financial literacy determinants. This is significant for the reasons that Romania, the second largest East European country, has the lowest financial literacy scores in Europe (Standard & Poor's, 2015; OECD, 2020 and scientific research in the area of financial education in Romania is scarce. The main objective of this study is to offer scientific grounds for further research on developing more efficient financial education programs.*

**Keywords:** financial education; financial literacy; money attitude; financial socialization; financial behavior; behavioral finance.

**JEL classification:** G53; G41; I30; A20

## 1. Background

The constructs of financial literacy and financial education are, in general, used interchangeably in research literature. Perhaps the most comprehensive and widely accepted definition of financial literacy is that developed by OECD: 'A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing.' (OECD, 2018).

*Why Romania?* Household finance has become increasingly more complex in recent years with consumers facing more complex financial products, even after the 2007-2008 financial crisis. Celerier and Vallee published a study in 2014, analyzing 55,000 financial products retailed to consumers in 15 European countries in the period 2002 to 2010. Financial complexity has been constantly increasing in line with an increased competition. Meanwhile, financial literacy of individuals and household financial sophistication seem to remain low (Lusardi et al., 2010). Interestingly, Celerier and Vallee show that these complex financial products were often concentrated in markets with less sophisticated consumers (Celerier and Vallee, 2014). In this context, the case of Romania deserves attention in scientific research, as it has the lowest financial literacy rate in the European Union (Standard & Poor's, 2015), it is also one of the poorest countries in EU, with a highly leveraged population (credit is taken at a 45-47% debt/income ratio, until December 2018, with National Bank of Romania limiting the credit debt/income ratio at 40% starting January 2019). OECD/INFE 2020 International Survey of Adult Financial Literacy placed Romanians as a close second last.

*Why is it important to understand financial literacy and its the determinants?* In accordance with previous studies, a low level of financial literacy leads to poor

financial behavior and suboptimal financial decisions, conducting to a low level of financial wellbeing (Lusardi & Mitchell, 2007). Adding to this finding, higher financial literacy helps individuals to make better financial decisions, causal effect on better economic outcomes (Lusardi & Mitchell, 2014).

*Why have we focused our research on youth?* Beverly & Burkhalter, 2005 show that financial skills and knowledge acquired early in life constitute the foundation of future financial behavior and wellbeing.

As the aim of this paper is to test the strength of a series of behavioral and attitudinal predictors into determining dependents of financial literacy, we researched the relationships between these predictors - financial socialization, financial experience, money attitude, childhood experiences - and financial literacy.

## 2. Hypotheses

We expect the following dependences of financial literacy (FL):

*H1: Higher income for youth has a positive effect on financial literacy.*

This is a common hypothesis in financial literacy research as it is assumed that it is quite difficult to be financially literate and to have a low income. Moreover, it is generally assumed that income is a great motivator to improve financial literacy. A multitude of international studies tested this hypothesis with mixed results in literature, both confirming and not confirming the hypothesis. It is therefore good practice to test this hypothesis on Romanian population.

*H2: Financial experience has a positive effect on financial literacy.*

Considering as proxies handling personal money (money allowance / income) or having a bank account, people with financial experience tend to be more financially literate (Johnson & Sherraden, 2007). From an educational point of view, financial knowledge is absorbed more rapidly through practical experience, hence financial experience should be an important predictor for financial literacy.

*H3: Money attitude has a positive effect on financial literacy.*

There is a relationship between money attitudes and financial knowledge and behavior (Norvilitis et al., 2006). In particular, when people perceive money as positive, money attitude is a strong motivator to improve the financial literacy level (Edwards, Allen, & Hayhoe, 2007).

*H4: Of the 5 main socialization agents, family has a positive effect on financial literacy.*

*H5: All childhood experiences have a positive effect on financial literacy, but the most significant are parental education and financial socialization by parents.*

*Financial socialization.* Sources of financial knowledge (friends, family, media, school, work, internet – collectively named socialization agents) have a positive effect on the level of financial knowledge (Hilgert et al., 2003). Grohmann et al., 2015 is cumulating the socialization factors into a new construct of *childhood experiences* and researched its effect on the degree of financial literacy: family and school have a positive effect, while financial socialization through work and money has a negative one.

## 3. Methodology

### 3.1. Dataset

A web-based survey was sent in November 2018 to young Romanian population (age 14 – 30 yrs.). To avoid question order bias, questions were shuffled randomly in each section of the questionnaire. Considering the young age of the respondents and the high possibility of trolling, we included a control question to validate the understanding and reading of the questionnaire. Data was collected during November - December

2018. The respondents did not receive any monetary compensation for completing the survey.

After validation of raw data, a sample of 2197 respondents was considered (mean age 17.43 yrs., 61% female).

### **3.2. Questionnaire**

The construct of *financial literacy* includes both skills and knowledge, however measurement instruments are dominated in the literature by objective knowledge, measuring a cognitive factor, as a score or a percentage of correct answers (Fernandes et al., 2014; Lusardi and Mitchell, 2014). Most studies have measured financial literacy on a reduced scale 3-5 items, including the widely-disseminated Standard & Poor's Global Survey. However, to assess more dimensions of financial education, this study used the 13-items scale developed by Fernandes et al., 2014, as part of a meta-study.

Independent variables are measured using instruments already tested in previous researches. *Financial Socialization Agents* adapted from Hilgert et al., 2003, one-item with six categories: family, school, peers, mass media, internet search engines, and social media.

*Childhood Experiences* extracted from Grohmann et al., 2015 consists of five scales (13 items): parental education, financial socialization by parents, education quality, financial socialization through money and work.

*Risk Aversion* (Barsky et al., 1997, adapted by Grohmann et al., 2015): one item measuring the level of investment (as a percentage) from a lottery win.

*Money Attitude* (28 items, adapted from Tang's Money Ethic Scale, 1992) tested for consistency on the Romanian sample and 3 dimensions emerged upon factor analysis: good/power, evil/avoidance, reward for efforts.

### **3.3. Analysis**

Using a series of linear regressions, we analyzed the relationship between financial literacy as a dependent variable and financial socialization, financial experience, money attitude and family background and childhood & demographic characteristics as independent variables.

### **3.4. Results**

Family income appears only to be significant in the model when household income is over 4500 RON. As expected, childhood experiences have a positive effect on the level of financial literacy, through parental education variables father education (if university). Quite unexpectedly, if the youth in our sample consider their parents have a good understanding of financial matters, the effect on the level of financial literacy of the child is negative, not large, but statistically significant. This could be explained by the strong economic dependency that the youth has with their parents not fully grasping that financial literacy is a personal hygiene factor.

Financial Risk Adversity seems to be a positive motivator in increasing the level of literacy. Financial Socialization through Money and Work apparently bears a positive effect on financial literacy when the child receives money allowance, but a negative effect when the child has a job. Money attitude has a strong large positive impact on financial literacy score.

Quality of education (proxy: urban studies) appears to have a strong positive effect on the level of financial literacy. Financial education of any type was found to have a positive effect on financial literacy, however financial training / courses outside the school curricula seem to have a larger positive effect on financial literacy.

Overall, background characteristics, financial experience, money attitude and financial socialization explain a 20% of the variance of financial literacy. In behavioral economics this is considered a good result, especially in an exploratory study.

## 5. Practical Implications

The results of this research could lay the foundation of further research on how to develop financial education initiatives to improve financial literacy of younger generations, perhaps including initiatives targeted to increase the involvement of parents especially early in the life of their children, as the childhood variables have a lifelong impact on the behavior of adults.

## 6. Originality/ value

To the best of our knowledge, this is the first quantitative study researching the determinants of financial literacy amongst youth in Romania.

## 7. Acknowledgments

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# DIMINUTION OF TAX EVASION AND VAT FRAUD BY BLOCKCHAIN TECHNOLOGY

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**Abstract:** *In recent years, digitalization became an important aspect in both public and private sector as well as in implementation of governmental issues. Technological developments cause to accelerate proceeding of multiple tasks. As one of the major part of digital system, blockchain technologies started to be applied on different financial services, accounting, as well as on taxation. Taking into consideration the key benefits of blockchains such as real time information, security, transaction integrity, optimization of processes and transparency allow to explain the blockchain as a solution of tax evasion and a tool for increasing tax compliance. This paper presents the research on blockchain technology in tax systems and its possible influence on minimization of tax evasion.*

**Keywords:** tax; tax evasion; digitalization; blockchain

**JEL classification:** H26

## 1. Introduction

In the period of global financial crisis, a significant diminish is usually observed in the budget of governments and they make efforts to increase revenues and need to finance principal enterprises, in addition, to maximize assistance of specific groups of inhabitants. The states starts detailed review for the major sources of state budget such as sales taxes, charges, individual income taxes, corporate income taxes because of crisis. The governments have to increase both amendments in tax systems and start to find the effective solutions for tax evasion

By maximization the efficiency and effectiveness of operations of trade transactions will be achieved to make better digitalization which lead to increase tax compliance. Digital information mitigates the gathering of authentic, correct and complete data about transactions, enhancing the power of border agents to gather the acceptable level of trade taxes. Digitalization in tax administrations and computerized tax procedures should make the idea for further legal system reforms and evasion can be reduced by this system.

Nowadays, one of the most popular technology service is the blockchain which is the database for collection of information that is saved on electronical system. In terms of taxation, the blockchain technology service can be more efficient in order to increase tax compliance and for eradication of tax evasion. This paper will explain the possible influence of blockchain on tax systems and tax evasion. Blockchain is a decentralized distributed ledger technology which is a kind of database that is duplicated shared and synchronized among the delegates of a network. The transactions such as the exchange of money or information are recorded by the distributed ledger among the members in the network. It is the database of many transactions that are connected to the previous transactions, making chain of information and is multiplied and shared to the whole people who is

the member of the network, so the copies of database can be identified. The records of information which refers to each transaction are never eradicated in that system and blockchain doing recording process continuously when transactions occur. Blockchains became more popular in cryptocurrency systems in order support the security and decentralized record of transactions. This innovative system reduces costs and efforts and increase effectiveness of transaction and can be applied in many sectors such as finance, law and taxation and the most important point is that the activities happen without participation of third party between two individuals or companies.

## **2.Theoretical framework**

When an individual or enterprise deliberately avoids to pay true amount of tax liability, tax evasion arises. In the first theories of tax evasion were proposed that the authorities treat with taxpayer as an isolated anticipated utility maximizer who makes the decision under uncertainty.(Allingham and Sandmo, 1972). According to this idea the taxpayer is absolutely individualistic and unethical. Spicer and Becker (1980) believe that those who assume the taxpayers encountered by unfairness of the tax system seem more likely to do tax evasion.

On the other hand, many economists probably agrees that social interaction effects can cause to tax evasion decisions. Erard and Feinstein (1994) mention the role of disgrace and guilt in behavior of tax compliance. Gordon (1989) and Naylor (1996) explain that persons may derive a benefit from adhering to the standard model of behavior in the reference group. Furthermore, by learning from colleagues, a taxpayer can find out more efficient ways to fail fully report of profit, reduce the risk of getting caught, or minimize fines connected with tax inspections.

Additionally, there are also economical factors of tax evasion such as profit sources, amount of fees and audit rate. The income level also affects the tax evasion.(Mason.R and Lowry.H 1981). People who have the average income are more likely to follow the tax law and rules, because they are stressed about the mental and financial punishment. In comparison with private sectors, public sectors are less willing to do tax evasion because they have a reason for declaration of high profits.

Understanding of tax evasion and effective techniques for dealing with it, distinguished two methods for its solution: audit controls and fine. The controls would allow the detections of more tax evasions The evasion can be reduced by imposing the high amount of fines and it will be an important disincentive for future commitment of such offenses.

The new solution for tax evasion in the modern tax systems can be digitalization. The blockchain technology is the main part of that digitalization which offers many benefits for not only tax systems, but also the whole financial sector. Since blockchain is a new concept, it is very difficult to find a complete and correct definition in the literature. Blockchain is the magical system where anyone can install programs, the current and previous states of each program are always visible to everyone, and the applications running on it are cryptographically secured.(Ethereum Blog,2018). Blockchain is basically a technology designed for the safe and secure storage and management of valuable information (Doğantekin,2018). Blockchain is more than an information and communication technology, because it facilitates economic organization and control.(Davidson, 2016).



### 3. Blockchain technology and tax evasion

The analysis of advantages of blockchain will make easier to understand its capacity in regarding with reducing the level of tax evasion in modern tax systems. Blockchain has become an international technology that manages to connect the financial world effectively and provide conclusive benefits by reducing risk and enabling successful resource allocation (Potekhina, 2017). Blockchain can affect strongly and reorganize tax systems and accounting. The governments, their databases and network systems will more likely need essential changes and revolutions for adaptation to blockchains and for high level of digitalization. In short term, the effectiveness of application of new system for taxes looks unrealistic, however in the long term, blockchain may turn to be principal factor in implementation of automated tax processes for both small and large companies.

The automation of financial procedures by smart contracts can cause to maximization of value-added taxes and it also make tax inspections more efficient. The smart contract is a type of contract which contains the terms of agreement between two anonymous parties without requirement for central power or any authority and regulations. This contract allows the participants to track irreversible transactions by special code.

Despite of benefits of blockchain, governments are still in doubt to start application of new system. The following table shows some countries' approaches to cryptocurrencies and blockchain. China and Russia are countries that impose bans and sanctions against cryptocurrencies and have a negative attitude towards that system.

**Table 1.** Approaches of countries on cryptocurrency and blockchain

<b>State</b>	<b>Cryptocurrency</b>	<b>Blockchain</b>
Japan	support	support
France	negative	support
Austria	negative	support
Russia	no support	negative
Turkey	negative	support
China	no support	support
Canada	negative	support
Singapore	negative	support

Source: OECD Workshop on Digital Financial Assets.

The experimentation of blockchain for tax collection and other government services has already been launched by some European governments. Blockchain is being checked to digitalize the invoices, customs duties and non-resident profit tax in Sweden. Estonia has started to apply that innovation on many government services such as health, banking, and business records.

Additionally, in terms of tax compliance and tax evasion the Microsoft and PwC companies made decision to develop together a "VAT Fraud Prevention Prototype" which is based on Microsoft Blockchain Essentials solution and Microsoft Azure Blockchain Workbench. (Kuralay et al., 2019)

The prototype is intended to allow of implementation of blockchain technology in fight against VAT fraud in three stages. The first stage is information exchange which refers to the establishment of blockchain as a reliable platform which allows the information exchange and registration of transactions among different shareholders. The second one explains the smart contracts in solution of the liquidity problem of

VAT. The contracts will make enable automated payments of VAT amount by enterprises, adjustment of tax accounts automatically. Furthermore, it achieves the restriction of administrative burden in the management of tax procedures in business. The last stage is about application of cryptocurrency in payment of VAT. Obviously, it assumes that all transactions will be realized by a crypto currency.

Such efficient system will make enable the automation of tax payments and will also mitigate the access on information system for tax administrations if there is a suspect for evasion, fraud or errors.

#### 4. Conclusion

In this study we analyzed the most important implications of the application of blockchain technology in tax system, the advantages of this technology and its influence on tax evasion and tax compliance. Digitalization is modern transformation that will have effects on all operations of businesses, accounting, tax systems, value-chains etc.

The advantage of using blockchain is that there is no intermediary (third party) when transactions take place between two parties, and no central owner to control it. Blockchain facilitates tax payment compliance, the state or government may tend to be more self-confident and independent from third-party financial assistance (banks, businesses and other donor states).

Blockchain technology is a new application in the field of tax system and this will take time to settle in. However, many countries accepted to apply the new innovation on different sectors, especially on financial sector. Being more efficient and secure system allow to point out blockchain application will surely affect tax compliance in a positive manner as well it will allow to reduce tax evasion in financial environment.

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## THE INFLUENCE OF ECONOMIC STRUCTURE AND INSTITUTIONAL VARIABLES AND VAT GAP

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**Abstract:** *The phenomenon of VAT Gap, to a greater or lesser extent, is an acute problem in all countries of the European Union (Member States), regardless of their level of economic development. The objective of the study is to analyze the strength and the direction of the relationship between the VAT Gap and the following economic structure and institutional variables: Fiscal freedom (FF), Government effectiveness (GE), Human development index (HDI), Corruption perceptions index (CPI) and People at risk of poverty or social exclusion (ARPE). Our study is consolidated on a 2009 – 2018 database, for the EU-26 Member States, including United Kingdom. Within the study, we developed a Spearman Correlation between VAT Gap and each variable, aiming to point out whether these variables have a strong positive or negative influence on the VAT Gap.*

**Keywords:** VAT Gap; fiscal freedom; government effectiveness; human development; corruption; social aspects.

**JEL classification:** E26; G41; H11; H26.

### 1. Introduction

VAT evasion reduces significantly the budget revenues, and it may be approximated by way of VAT Gap, which refers to the difference between the total VAT that should have been collected according to the applicable VAT Law (further only as VTTL) and VAT actually collected by public budgets. It estimates revenue losses caused by VAT evasion and avoidance, fraud schemes, miscalculations, bankruptcies or financial insolvencies. Fraud is considered to be the main cause of VAT Gap (European Commission, 2020).

In the last two decades, the volume of VAT evasion has had an alarmingly upward trend. Furthermore, the most recent report provided by the European Commission (2020) indicates that the VAT Gap amounted to EUR 140 billion, which means 11.01% of theoretical VAT liability, in the European Union in 2018. The report also forecasts a potential increase in VAT revenue losses in 2020 to €164 billion in 2020, due to the effects of the coronavirus pandemic on the global economy.

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

Studies have empirically investigated the factors that influence the collection of VAT revenues. Christie and Holzner (2006) examined for the period 2000-2003 VAT losses in 25 European countries and highlighted a positive influence of the weighted average VAT rates on VAT losses. Other studies show that the efficiency of the collection of VAT systems decreases with the increase of tax rates and due to the reduction of the tax base on which it's applied and the increase of tax evasion (Matthews, 2003).

Reckon (2009) analyzed the estimates of the VAT Gap for EU countries. His studies showed that the variables Corruption perceptions index (CPI) and the position of the legal institutions in the country have a statistically significant value in influencing the VAT Gap. Zidkova (2014) analyzed the influence of fifteen variables on the VAT Gap for the year 2002, respectively for the year 2006. The conclusions showed that in 2006, comparing to 2002, the VAT Gap wasn't influenced by the standard VAT rate and the share of the shadow economy. Besides, other variables had a negative impact on the VAT Gap: the number of VAT rates, VAT revenue from GDP, final consumption from GDP and the share of the country in gross trade.

Wider studies on the VAT Gap are provided by European Commission CASE studies, using an econometric analysis that regressed the VAT Gaps on a several explanatory variables in EU countries. The results showed that the tax collection gap is also influenced by the efficiency of governments in the application and management of the application of the tax in each country.

## **3. Aims of the research and defining the variables**

The objective of the study is to analyze the strength and the direction of the relationship between the VAT Gap and the following economic structure and institutional variables: Fiscal freedom (FF), Government effectiveness (GE), Human development index (HDI), Corruption perceptions Index (CPI) and People at risk of poverty or social exclusion (AROPE) at EU level. In the following, we will present in brief the variables.

Value Added Tax gap (VAT Gap) is provided by European Commission VAT Gap reports and represents the difference between all VAT that should have been collected, VTTL, and the amount of VAT actually collected by the public budget.

Fiscal Freedom (FF) is provided by Heritage Foundation and measures economic freedom using 12 quantitative and qualitative factors.

Government effectiveness (GE) is provided by World Bank and comprises the perceptions of the quality of public services and the degree of its independence from political pressures, the quality of the policy and its implementation, and the credibility of the government's commitment to such policies.

Human development Index (HDI) is provided by United Nations Development Programme and it measures the average achievement in three key dimensions of human development in a given country: health, education and income.

Corruption Perceptions Index (CPI) is provided by Transparency International database and it's a composite index which ranks countries based on how corrupt a country's public sector is perceived to be by experts and business executives.

People at risk of poverty or social exclusion (AROPE) is provided by Eurostat and is related to the number of persons who are at risk of poverty after social transfers, severely materially deprived or they live in households with very low work intensity.

#### 4. Research methods and results

In order to analyze the relationship between the above variables, it was developed a Spearman Correlation that takes into account the data for 28 European Union Member States for the period 2009-2018. Due to lack of national data, we excluded Cyprus and Croatia, but we included the United Kingdom, because in the period analyzed it was still a Member State. Correlation is a bivariate analysis used to assess the strength of the possible association between two different variables and the direction of the relationship. Table 1 lays out the results of running the Spearman Correlation.

In this paper, we used the VAT Gap as % of VTTL provided by the Study and Reports on the VAT Gap in the EU-28 Member States, final report 2020.

**Table 1:** Spearman correlation coefficients between VAT Gap with each economic structure and institutional variable at EU level

Member States	Relation between VAT Gap % of VTTL and economic structure institutional variables				
	FF	GE	HDI	CPI	AROPE
EU 26 countries	-.454**	0.015	-.701**	-.752**	.628**

Source: Author's own processing using SPSS

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

From Table 1 we can notice that at EU level, in terms of strength of the correlation we can observe, a relatively strong connection between the variables, excepting GE. Other studies suggested that in the countries with a high level of GE expressed through the perceptions of citizens on the quality of public services, the quality of the civil service, and the degree of its independence from political pressures will reduce tax evasion (Dronca A.T., 2016).

A reverse direction of significant correlation coefficients was remarked between FF and HDI with VAT Gap. It can be assumed that a high level of fiscal freedom, transposed through quantitative and qualitative factors like tax burden, fiscal health, property rights, investment or financial freedom, and a high level of standard of living and higher access to knowledge will determine the taxpayers to comply to pay VAT, thus leading to the reduction of the VAT Gap.

Corruption perception index (CPI) registered the highest value of the coefficient, -0.752, which shows that it has significant importance to the VAT Gap level. In brief, a high level of CPI reduces the VAT Gap. In other words, less corruption is perceived by experts and business executives, which means a higher CPI index, would lead to a reduced VAT Gap by increasing the efficiency of VAT collection.

The coefficients of people at risk of poverty or social exclusion had a relatively strong (.628\*\*) positive connection, as was expected. Thus, in countries with a higher number of people at risk of poverty after social transfers, severely materially deprived, or living in households with very low work intensity, the tendency to avoid paying VAT is higher, so the VAT gap will register wider levels.

## 5. Conclusion

As per the literature, it is stated that fiscal and budgetary policies of states, as well as the effectiveness of the institutions have a significant role in defining the aspects of the economic environment in order to have a high degree of VAT collection, thus a lower VAT Gap. Furthermore, the results of this paper show that at EU level, increasing the level of Fiscal Freedom, Human Development Index, Corruption Perception Index are correlated with decreasing the values of VAT Gap. Thus, our study shows that in 26 Member States (1) with a high level of freedom in terms of tax, transposed through quantitative and qualitative factors like, tax burden, fiscal health, property rights, investment or financial freedom (2) with an increased value of HDI, translated through a high level of standard of living and access to knowledge and (3) with less corruption perceived by experts and business executives, the taxpayers are more inclined to comply with the VAT requirements, which can be reflected in a lower VAT Gap.

Also, the level of GE and the number of people at risk of poverty or social exclusion increase or decrease in the same direction with the level of VAT Gap, with reservations regarding GE, because its p-value is not relevant, in our study presented hereby. In the countries with a higher number of people at risk of poverty after social transfers, severely materially deprived or living in households with very low work intensity, the tendency to avoid paying VAT is higher, so VAT Gap will register wider levels.

In conclusion, as VAT has a relevant contribution to the financing of public goods and services, this relationship between VAT Gap and economic structure and institutional variables is relevant for economic development and institutional quality of the business environment and it can be further studied in studies elaborated for groups of European countries and a longer period of time.

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## FAVORING FACTORS OF THE UNDERGROUND ECONOMY

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**Abstract:** *A general and theoretical approach of underground economy phenomenon on the main components: tax fraud, undeclared work and criminal activities, indicates the existence of a close correlation inversely proportional between the size of the phenomenon and the degree of economic development. The higher the share of the underground economy in a country's Gross Domestic Product, the more the budget will be deprived of funds that bypass the tax system, respectively an unfair redistribution of funds in society. Taxes directly affected by this phenomenon (profit tax, value added tax, payroll tax and excise duties) are essential sources for the formation of any budget, any damage to them is directly reflected in the degree of collection. In fact, using the investigating literature methodology, followed by the analysis and synthesis of data allowed us to identify the main factors favoring the underground economy and how to manifest them. We started from a theoretical approach, as a starting point for future in-depth studies on the phenomenon of tax fraud as the essence of the underground economy, seen in terms of the complex effects generated in society.*

**Keywords:** underground economy, favorable factors, tax fraud, undeclared work

**JEL classification:** E26, H26

### 1. Introduction

The activities included in the underground economy are part of an extended range, a distinct category within the economic sphere being that of the "gray" economy. This includes activities located at the edge of the law, which speculate on the existing legal framework for a biased interpretation, in order to reduce the tax obligations due as a result of the application of legal or economic/accounting artifices. Overall, the underground economy consists of two main components (Schneider, 2013), namely undeclared work to avoid taxation and unreported business income, in order to avoid the tax burden. In an attempt to measure the underground economy, the literature (Schneider, 2013) is limited only to legal activities, without including aspects related to illegal activities (drug trafficking, prostitution, smuggling, money laundering, etc) or own production for self-consumption.

### 2. Conceptual delimitations and favoring factors

The underground economy is defined in various ways, most ideas converging on unregistered economic activities, without being included in the calculation of Gross National Product - GDP (Feige, 1994; Schneider et al., 2015), respectively the total production of goods and services. on the market, legal or illegal, which is not included in GDP estimates (Smith, 1994).

The massive penetration of black money into official financial circuits may allow organized crime representatives to access important decisions concerning the functioning of the world economy. The complexity of the described phenomena is enhanced by the phenomenon of corruption, as a complementary element of criminal

activities. The presented aspects highlight the decisive role of the state in the generation of tax fraud, respectively in the control of criminal activities, this being an essential turning point for the pertinent analysis of the underground economy structure complexity.

Querying databases and literature (Dumitru, 2018) allows the classification of the main causes of the existence / size of the underground economy, respectively: *tax burden* in general or tax burden on labor in particular, being considered a determining factor for the size of the hidden economy. A high degree of tax burden leads directly to the tendency to avoid excessive taxation; *the quality of the institutions*, respectively their capacity to fulfill their role in society and economy. The existence of inefficient institutions in the control and fight against corruption, respectively a reduced capacity to impose the rule of law is likely to favor the development of the underground economy; *regulation*, particularly in the labor market, is a determining factor for the size of the underground economy.

The multitude of factors favoring the underground economy is underlined by various studies (Achim et al., 2019) which providing an empirical evidence that culture helps to explain the size of the shadow economy across countries. More specifically, four dimensions of culture: collectivism, femininity, short-term orientation, and restraint increase the size of the shadow economy. In addition, happier people are more likely to act honestly, thus causing a decrease in the size of the shadow economy. Furthermore, a high level of religiosity increases the propensity to participate in the shadow economy.

Recent studies (Achim et al., 2020) highlight the impact of technology on the size of the economic and financial crime, being relevant that increasing technology reduces the size of economic and financial crime. Additional, research and development expenditure (% of GDP) matter more in reducing the economic and financial criminality in low income countries than they do in high income countries.

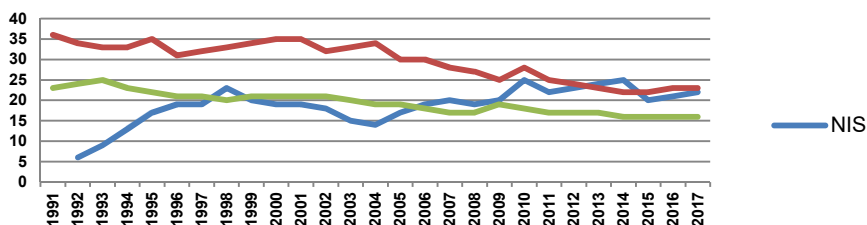
On the other hand, the existence of an interdependence was revealed between intelligence and economic and financial crimes. According to the study (Achim et al., 2021), it turned out that intelligent people are more prone to comply with the law and thus increase the efficiency of implementing governmental policies to reduce economic and financial crimes. The study aimed two groups of high- and low-income countries, resulting for high-income countries a positive relationship between intelligence and financial crimes, meaning that highly intelligent people from these countries own high professional knowledge and skills which are used to break the traditional technologies in order to get illegal benefits.

### **3.The structure of the underground economy**

The structure of the underground economy in this study includes the major components: *tax fraud*, *undeclared work* and *criminal activities*, according to the classification agreed by the Academy of Economic Studies (2018). Tax fraud is a relevant economic and social phenomenon in the national economy of any state, which all European Union countries face in different proportions. When we talk about tax fraud we will always refer to illegal/illicit tax evasion, without taking into account the legal component, is that of tax optimization, respectively "that form of interpretation of tax law which, without being fraudulent, leads to a reduction of the tax base, and therefore to pay lower taxes" (Bodu and Bodu, 2019). The study of some databases (National Institute of Statistics - NIS, 2019) and of the specialized literature (Medina and Schneider, 2018) certifies that Romania is at values higher than the European



average in terms of the share of the underground economy fueled by tax fraud, even if in a slight decrease (figure no. 1).



**Figure 1:** The underground economy share in Romania vs the EU average (% in GDP)

Source: NIS, Medina and Schneider, 2018

Undeclared work is an important segment that fuels the underground economy, and among those employed a significant percentage earns income that can not ensure in any form the existence of a person. There may be relevant differences between official income (based on registered employment contracts) and actual income. A pertinent explanation of this situation can be given by undeclared work, respectively the activity carried out without observing the legislative regulations.

Criminal activities are the most dangerous component of the underground economy and include: trafficking in drugs, weapons or nuclear materials, car theft, prostitution, corruption. The facts themselves present a double danger: a social one (recognized as such by society) and an economic one (on which not many studies have been directed).

#### 4. Conclusions, limits and research directions

Favorable factors study and underground economy structure cannot be limited only from the perspective of present analysis, but represents an initial point of understanding some correlations and interdependencies in the economy. Understanding the factors that determine the underground economy size allows the substantiation of more effective measures to combat this phenomenon. The study limits are given by the need to correlate the data with the harmful effects of the underground economy on the economic and social environment. We aim to guide research on the measures needed to combat the phenomenon and its effects.

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## THE EVOLUTION OF THE FISCAL PRESSURE IN THE DEVELOPED STATES, STARTING FROM THE DIRECT AND INDIRECT TAXES

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**Abstract:** *Starting with 1970, in Europe, the intensity of the implementation of budgetary policies for the two categories of states, developed states and emerging states, was observed. These policies had the effect of increasing the levels of taxation, also called progressive taxation, at that time. In order to stop this phenomenon of progressive taxation, the Maastricht Treaty and then the Stability and Growth Pact had the effect of forcing states to adopt different fiscal policies to reduce the sensation of fiscal pressure made necessary by budgetary deficiencies and accumulated public debt over time. As a matter of fact, since the 1990s, each Member State of the European Union has interpreted the treaties mentioned above separately; some states have reduced spending, and others have preferred to impose more significant fiscal pressure on citizens by increasing taxes and duties. In our article, we discuss those states that have managed to adopt strategies to reduce the phenomenon of fiscal pressure, the real winners of the times from then until now and their results during 1995-2020.*

**Keywords:** fiscal pressure, tax evasion, direct taxes, indirect taxes

**JEL classification:** E62; H21; H26; H71;

### 1. Introduction

The scientific and conceptual approaches to pressure were explained over time. According to the literature, fiscal pressure represents the tax burdens on the shoulders of citizens, with a risky and high endurance [Talpos I, Enache C. (2001) (Brezeanu P, 2009 )]. Since this phenomenon arose, specialists worldwide have been looking for economic measures and policies to reduce the harmful causes of rising tax levels. Therefore the fiscal pressure is of global interest to all specialists.

According to the literature, in the case of developed countries, policies have been adopted to relax tax burdens, with various measures to change or move the levels of progressive taxation on direct taxes, to reduce the phenomenon of fiscal pressure. Many authors have shown that, since the 1990s, developed countries have reduced the tax burden on indirect taxes (value-added tax, excise duties) but increased the level of the direct tax burden (income tax, corporate income tax, income tax on micro-enterprises, and others)

Our study aims to show the level of general fiscal pressure and the level of fiscal pressure produced by direct and indirect taxes in developed countries, compared to the average level of the European Union.

The study is conducted for a number of 7 developed countries (Denmark, Finland, Germany, Sweden, Spain, France, Luxembourg) for the period 1995-2020.

## **2. Literature review**

The present article is based on the teachings of Murray L. Weidenbaum, one of the great economists of the financial, economic field, who recounted the events of 1968, regarding the tax increases of taxes and duties, due to the rise in public debts and budget deficits. He presented through various specialized articles the negative impact of the fiscal pressure phenomenon on the personal incomes of the citizens, especially on the consumption and saving indicators. It has shown that tax increases, temporary or permanent, produce the effects desired by states but have adverse effects on taxpayers' consumption and investment expenditures, negatively influencing the living standards of taxpayers.

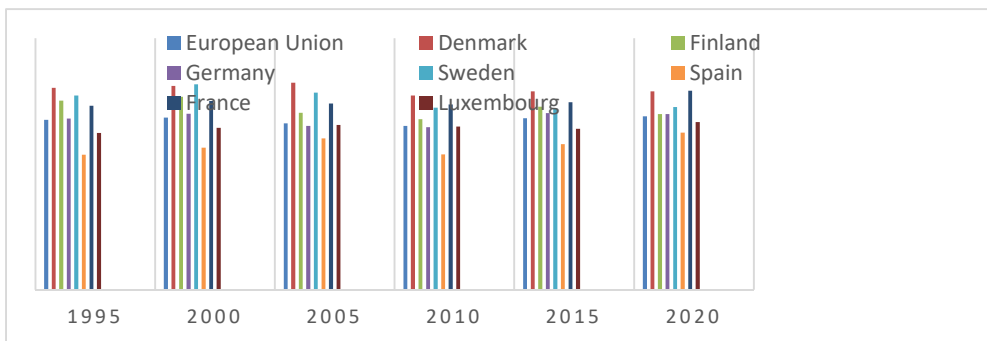
At the same time, a high level of fiscal pressure leads to an increase in the criminal phenomenon in the long run. Bernasconi et al. (2014) showed that an increase in the tax rate increases tax evasion. According to the same study, people's decisions to evade paying taxes depend on how they adapt to the level of fiscal pressure. In an era characterized by high capital mobility, abuses in the global financial system make it difficult to collect taxes and enforce the law. Tax revenues can help governments finance development and reduce dependence on foreign aid, which is why preventing and combating fraud has a critical role to play. In recent years, the intra-community VAT (value-added tax) system has been misused by new types of tax fraud, such as the so-called intra-community fraud scheme (MTIC), as well as fraud carousel. These types of economic crime bring losses of billions of VAT revenue to the EU Member States each year, including the Union. In 2015 alone, carousel fraud has led to losses of about 50 billion euros (European Parliament, 2018).

In his scientific article from 2016, Ruesga presents that the phenomenon of fiscal pressure is widespread throughout the world and not exclusively for a particular country or continent, which is under the sign of various limitations of government programs in different states.

Several scientific and empirical studies showed that the phenomenon of general fiscal pressure is treated in relation to different indicators such as direct taxes, indirect taxes, public debt, living standards, gross domestic product, but also corruption rates. Many authors have concluded that when governments observe a very high level of overall fiscal pressure, they tend to reduce tax burdens (Romano, 1993; Chaney et al., 2002; Eaton and Nofsinger, 2004; Chen and Matkin, 2017; Ghețu et al., 2021).

## **3. The level of general fiscal pressure in the developed countries of the European Union**

The phenomenon of fiscal pressure is essentially a macroeconomic concept, found actively in all states, which is not classified as a tax, being a purely quantitative phenomenon, macroeconomic (corresponds to the measure of fiscal pressure level), and microeconomic, if we relate it to the income of each citizen.

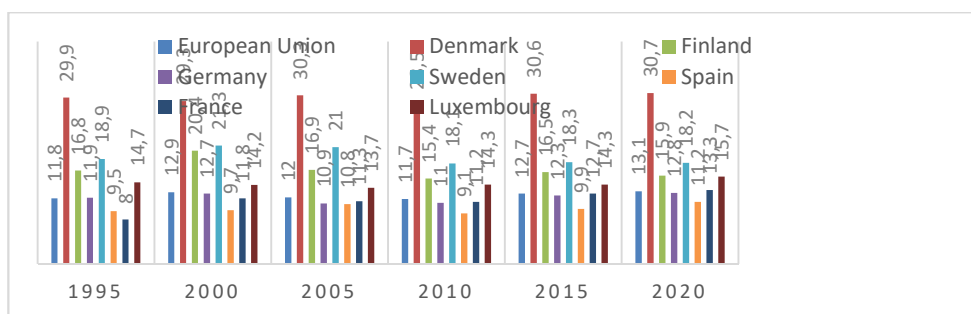


**Figure 1:** Level of general fiscal pressure

Source: own calculation based on AMECO data accessed on 19.10.2021

In Figure 1, we briefly presented the general fiscal pressure in the developed countries, starting with 1995. As the literature shows, we can see that the general level of fiscal pressure, compared to the average general level of the European Union, is higher in developed countries. The difference between developed and emerging countries is that even though they have a higher level of pressure than the general average of the European Union, the living standards are much higher due to fiscal policies correctly adopted and implemented. We can see that Denmark has been at the top of the rankings since 1995, with an average level of general fiscal pressure in the period 1995-2020 of 47.85%. We can see that, at the end of 2020, after 25 years, Luxembourg occupied for the first time the first place of the ranking, with a percentage of 47.5%. The state with the lowest level of fiscal pressure is the Spanish state, with an overall average level of fiscal pressure of 34.5%.

#### 4. The level of fiscal pressure in terms of direct taxes

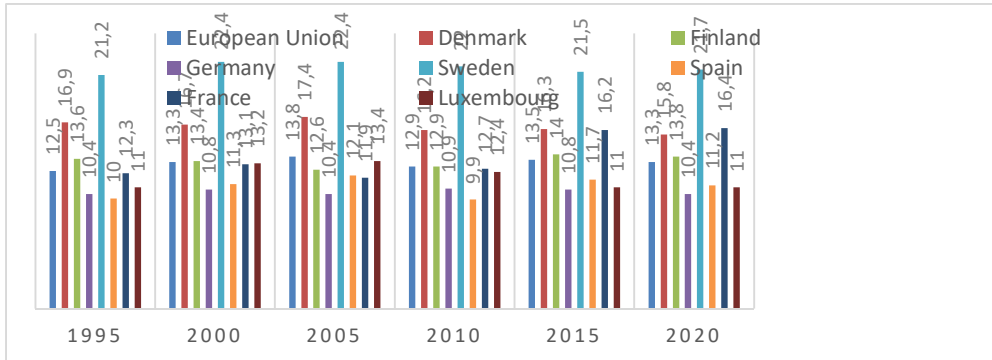


**Figure 2:** Direct taxes - Percentage of GDP

Source: own calculation based on AMECO data accessed on 19.10.2021

Figure 2 shows the evolution of direct taxes as a percentage of GDP in developed countries, analyzed every five years from 1995 to 2020. We can see that the level of direct taxes for developed countries is significantly higher than the average level of the European Union. This time, Denmark is in 1st place with the highest level of direct taxes for the whole analyzed period. France and Spain have once again a relatively low level of tolerability of direct taxes for the characteristics of developed countries, both being close to the average level of the European Union.

## 5. The level of fiscal pressure in terms of indirect taxes



**Figure 3:** Indirect taxes - Percentage of GDP

Source: own calculation based on AMECO data accessed on 19.10.2021

Regarding the level of fiscal pressure due to indirect tax rates, we see in figure no.3 that most developed countries are below the average level of the European Union. According to the literature, this result is an essential feature of budgetary policies adopted by developed countries. Only Sweden (with an average of 21.86%), Denmark and, in the last ten years, France have maintained a high level of the tax burden in terms of indirect taxes, above the average level of the European Union.

## 6. Conclusions

The ability to tax citizens and collect income efficiently is a cornerstone of state formation and survival.

Our study showed that, in all the developed countries analyzed, the level of fiscal pressure through direct taxes is significantly higher than the average level of the European Union.

Only Sweden, Denmark, and France bear a fiscal pressure above the average EU level in terms of indirect taxes.

According to the literature increasing taxes and duties harms economic growth. Nevertheless, the high level of taxes does not affect economic growth since developed countries have created a favourable environment for new investments and new investors.

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# CREATING A MODEL FOR PRIORITIZING PUBLIC INVESTMENTS USING ECONOMIC ANALYSIS, FINANCIAL ANALYSIS AND MULTICRITERIA ANALYSIS WITH FUZZY LOGIC

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**Abstract:** *The main limitation existing in the prioritization of projects is represented by the fact that there is no composite indicator that uses several indicators specific to both the financial analysis and the economic analysis of investment projects. The first innovative element of this paper is the creation of this prioritization model that includes indicators of financial analysis (40%), indicators of economic analysis (40%) and the indicator that uses the multicriteria algorithm with fuzzy logic (20%). This prioritization model involves the comparison of two or more projects and depending on the score obtained by establishes the order of priority of the projects. Prioritizing projects is necessary because the needs are much greater than the existing resources. The construction project of the Oradea - Arad highway has a score (100 points) higher than the construction project of the Oradea - Satu - Mare highway (87.91 points).*

**Keywords:** *model, prioritizing, public investments, multicriteria analysis, fuzzy logic, economic analysis, financial analysis*

**JEL classification:** *H72; H83; Q56; R53*

## 1. Introduction

The objective of this paper is represented by the creating a model for prioritizing public investments using economic analysis, financial analysis and multicriteria analysis with fuzzy logic. Economic analysis, in the context of cost-benefit analysis, involves estimating the contribution of a project to the economic well-being of a city, region or country. This analysis is very important because it also includes the economic and social benefits of an investment compared to the financial analysis which involves only quantifying the cash flows of an investment. Socio-economic analysis involves making fiscal corrections, corrections for externalities and transformation into accounting prices. The innovative element of this paper is the creation of this prioritization model that includes indicators of financial analysis (40%), indicators of economic analysis (40%) and the indicator that uses the multicriteria algorithm with fuzzy logic (20%).

## 2. Literature review

In this section I will present the main conclusions of the researchers regarding the multicriteria algorithm with fuzzy logic, economic analysis and financial analysis. A very important paper work in the literature is the one made by Marcel Boloş, Ioana Bradea and Camelia Delcea (2019) in which an innovative algorithm for optimizing investment decisions within companies is presented. A limitation of the article mentioned above is represented by the fact that it refers only to companies and that is why it is important to extend this algorithm to prioritize public investments.

Regarding the economic and financial analysis of investment projects, the specialized literature includes a multitude of methods, but the most relevant are those used in the guide for cost - benefit analysis, a guide developed by the European Commission. For the prioritization model created, indicators specific to financial analysis and economic analysis are used, but the key element is to use the specific indicator of multicriteria



analysis with fuzzy logic.

### 3. The model of prioritization of public investments

This prioritization model is innovative because it uses indicators specific to economic analysis, financial analysis and multicriteria analysis with fuzzy logic. Thus, 5 indicators are used for financial analysis (8 points / indicator x 5 = 40 points), 2 indicators for economic analysis (20 points / indicator x 2 = 40 points) and 1 indicator for multicriteria analysis with fuzzy logic (20 points). The 8 indicators are presented in the table below and were calculated for the 2 analyzed projects: Oradea - Arad Highway and Oradea - Satu - Mare Highway. This model of prioritization of public investments uses in percentage of 80% classical indicators (40% indicators of financial sustainability and 40% indicators of economic sustainability) while 20% is an indicator that uses a multicriteria analysis with fuzzy logic.

The term "fuzzy" has the meaning of "vague" or "unclear". Fuzzy logic uses values in the range [0,1] while in classical logic we have true (1) or false (0). An essential element of fuzzy logic is the belonging of an object to the set, with values between 0 and 1. In this analysis, the fuzzy logic multicriteria algorithm (AMLF) is designed so that the project beneficiary can identify which project (P1 and P2) best corresponds to the correlation with the two chosen criteria. Criterion 1 is represented by the economic rate of return (ERR) and criterion 2 is represented by the economic net present value (ENPV).

**Table 1:** Creating a composite indicator for prioritizing public investments using economic analysis, financial analysis and multicriteria analysis with fuzzy logic

Type of analysis	Indicator score		Indicator	
Financial analysis	40	8	Internal rate of return on total investment (IRR/C)	Financial indicator (F11)
		8	Internal rate of return on the national contribution (IRR/K)	Financial indicator (F12)
		8	Financial net present value of the total investment (FNPV/C) - mil. euro	Financial indicator (F13)
		8	Financial net present value of the national contribution (FNPV/K) - mil. Euro	Financial indicator (F14)
		8	Cumulative net cash flow - mil. euro	Financial indicator (F15)
Economic analysis	40	20	Economic rate of return (ERR)	Economic indicator (E11)
		20	Economic net present value (ENPV) - mil. euro	Economic indicator (E12)
Multicriteria algorithm with fuzzy logic	20	20	Multicriteria algorithm with fuzzy logic (MAFL) for ERR and ENPV	MAFL indicator (MAFLI)
Total	100	100		

Source: made by the author

$$P(1) \text{ Score} = F11(1) + F12(1) + F13(1) + F14(1) + F15(1) + E11(1) + E12(1) + MAFLI(1) = 100.00$$

$$P(2) \text{ Score} = F11(2) + F12(2) + F13(2) + F14(2) + F15(2) + E11(2) + E12(2) + MAFLI(2) = 87.91$$

Where:

P1 and P2 are the two projects analysed. P1 is Oradea - Arad highway and P2 is Oradea - Satu - Mare highway.

F11, 2, 3, 4, 5 – financial indicator

E11, 2 – economic indicator

MAFLI - Multicriteria algorithm with fuzzy logic (MAFL) for ERR and ENPV

**Table 2:** Prioritization of two infrastructure projects (Oradea - Arad highway and Oradea - Satu - Mare highway) by using a new composite indicator for prioritizing public investments using economic analysis, financial analysis and multicriteria analysis with fuzzy logic

Indicator	Oradea - Arad highway (P1 Project)	Oradea - Satu - Mare highway (P2 Project)	Project score of Oradea - Arad highway (P1 Project)	Project score of Oradea - Satu - Mare highway (P2 Project)
Internal rate of return on total investment (IRR/C)	-6.80%	-6.82%	8.00	7.97
Internal rate of return on the national contribution (IRR/K)	-0.99%	-1.04%	8.00	7.62
Financial net present value of the total investment (FNPV/C) - mil. euro	-637.61	-649.32	8.00	7.86
Financial net present value of the national contribution (FNPV/K) - mil. Euro	-96.26	-98.79	8.00	7.80
Cumulative net cash flow - mil. euro	-308.92	-319.06	8.00	7.75
Economic rate of return (ERR)	6.21%	5.26%	20.00	16.94
Economic net present value (ENPV) - mil. euro	869.94	717.82	20.00	16.50
Multicriteria algorithm with fuzzy logic (MAFL) for ERR and ENPV	0.8424	0.6521	20.00	15.48
<b>Total</b>			<b>100.00</b>	<b>87.91</b>

Source: made by the author

This prioritization model involves the comparison of two or more projects and depending on the score obtained by establishes the order of priority of the projects. Prioritizing projects is necessary because the needs are much greater than the existing resources.

The construction project of the Oradea - Arad highway has a score (100 points) higher

than the construction project of the Oradea - Satu - Mare highway (87.91 points), so the Oradea - Arad highway project is the priority project considering that it has a score higher for each of the 8 indicators analyzed.

#### **4. Conclusion**

The first innovative element of this paper is the creation of this prioritization model that includes indicators of financial analysis (40%), indicators of economic analysis (40%) and the indicator that uses the multicriteria algorithm with fuzzy logic (20%).

The second innovative element of the paper is the comparative analysis of some infrastructure projects using fuzzy logic is an innovative element and the results of the analysis of the two projects show that the multicriteria algorithm with fuzzy logic (AMLF) can be used successfully to prioritize infrastructure projects.

The third innovative element of this paper work is represented by the use of the variable "Benefits due to the development of economic activity and job growth" in the comparative economic analysis for highway projects. Thus, this variable is not provided in the Guide to Cost-Benefit Analysis (CBA) of the European Commission but the importance of quantifying the benefits obtained at the level of society as a result of economic development following the implementation of a highway construction project. The construction of a highway will lead to job creation due to boosting the development of industrial areas in the vicinity of the highway as well as logistics areas. Increasing the number of jobs means additional revenue for public budgets (income taxes and social contributions) as well as additional revenue for employees. At the same time, the creation of new jobs means increasing competition in the labor market and boosting wage growth. At the same time, the new industrial areas involve the construction of new buildings, respectively involve taxes on land and buildings collected by local public authorities.

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# MULTICRITERIA ANALYSIS WITH FUZZY LOGIC OF INVESTMENT COST AND UPDATED NET CASH FLOW FOR INFRASTRUCTURE PROJECTS

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**Abstract:** *The main limitation of the prioritization of infrastructure projects using the classic model of cost-benefit analysis (financial analysis, economic analysis and risk analysis) it is represented by the possibility to overestimate the socio - economic effects of the investment that would have been financially unsustainable. The innovative part of this paper is the fact that it combines elements of the classic financial analysis of investment projects with the elements of modern analysis using fuzzy techniques. This multicriteria analysis with fuzzy logic (MAFL) uses 3 criteria (total investment cost, maintenance costs and updated net cash flow) taken from the financial analysis of 3 investment projects. The selected project is P2 (Construction of the Oradea - Satu - Mare Highway) according to the application of the multicriteria algorithm with fuzzy logic (AMLF) which assumes that the selected project is the one with the maximum value in the column vector for the global affiliation corresponding to the projects (inference).*

**Keywords:** *model, prioritizing, public investments, multicriteria analysis, fuzzy logic, economic analysis, financial analysis*

**JEL classification:** *H72; H83; Q56; R53*

## 1. Introduction

The objective of this paper is to create a model for prioritizing public investment using multicriteria analysis with fuzzy logic (MAFL) applied to specific criteria for financial analysis of projects. In this paper we start from a multicriteria algorithm with fuzzy logic and from elements of the financial analysis of public investment projects. This model uses 3 criteria (total investment cost, maintenance costs and updated net cash flow) taken from the financial analysis of 3 investment projects. The 3 investment projects are represented by: P1 - Construction of the Oradea - Arad highway, P2 - Construction of the Oradea - Satu - Mare Highway and P3 - Construction of the Oradea - Deva Highway. There is a limitation of the prioritization of infrastructure projects using the classic model of cost-benefit analysis (financial analysis, economic analysis and risk analysis) because the substantiation of the decision to prioritize projects may be erroneous. Thus, it is opportune to introduce new tools to analyze the prioritization of projects.

## 2. Literature review

In this section I will present the main conclusions of the researchers regarding the multicriteria algorithm with fuzzy logic to prioritize public investments. Walczak and Rutkowska (2017) developed a mechanism for prioritizing a city's public investment based on participatory budgeting. One reason for achieving this mechanism is to increase the popularity of this type of project prioritization in relation to the vote in the local city councils.

Shahraki Ali Sardar, Shahraki Javad and Seyed Arman Hashemi Monfared (2018) studied the prioritization of water projects because this is an essential element for sustainable development. The projects were analyzed using the WEAP (Water Evaluation and Planning System) model, a model that evaluates projects using fuzzy techniques.

### 3. The multicriteria analysis with fuzzy logic (MAFL) model of prioritization of public investments

Fuzzy logic uses values in the range [0,1] while in classical logic we have true (1) or false (0). The multicriteria algorithm with fuzzy logic has 3 stages which will be detailed below:

**Step 1** - The multicriteria algorithm is based on the following hypotheses:

a) The Romanian state intends to carry out one of the three projects (P1 - Oradea - Arad highway, P2 - Oradea - Satu - Mare highway and P3 - Oradea - Deva highway), projects that will have an important impact on society, taking into account the three criteria mentioned above.

b) For each project are established implementation criteria  $C_j$ , with  $j=\overline{1,m}$  in accordance with the purpose of the projects  $P_i$  with  $i=\overline{1,n}$  will have assigned the criteria; with  $i=\overline{1,n}$  and  $j=\overline{1,m}$  of the form:

$$P_1 = f(c_{11}, c_{12}, c_{13},)$$

$$P_2 = f(c_{21}, c_{22}, c_{23},)$$

$$P_3 = f(c_{31}, c_{32}, c_{33},)$$

c) There are projects that meet the achievement criteria  $C_j$ ,  $j=\overline{1,m}$ .

d) For each achievement criterion  $C_1$ ,  $C_2$  and  $C_3$  the decision maker (project beneficiary) establishes a maximum value for each achievement criterion  $C_{jmax}(P_i)$  also a minimum value  $C_{jmin}(P_i)$  considered as the level below which the beneficiary does not agree with the project implementation. All achievement criteria must meet the following inequality  $C_{jmin}(P_i) \leq C_j(P_i) \leq C_{jmax}(P_i)$ .

e) The global degree of belonging of a project  $\mu_g(P_{ji})$  substantiates the investment decision of the state in the realization of one of the three projects. The project with a global degree of ownership  $\mu_g(P_i) \leq 0,5$  is considered not to meet the existing objectives at national level regarding the three criteria of the financial analysis specific to investment projects: criterion 1 - Total cost of public investment, criterion 2 - Operating and maintenance costs and criterion 3 - Updated net cash flow.

**Step 2** - The multicriteria algorithm considers several definitions:

**Definition a):** The vague sets for the three criteria  $C_j P(i)$  are defined with  $j=\overline{1,m}$ , related to the three projects and the degree of belonging of the projects to the criteria  $\mu_g(P_{ji})$  of the form:

$$C_j(P_i): (P_i), \mu_{C_j}(P_i)$$

For each achievement criterion, a maximum level that is accepted as well as a minimum level below which the projects cannot be accepted shall be established in accordance with hypothesis (d).

$$C_{jmin}(P_i) \leq C_j(P_i) \leq C_{jmax}(P_i)$$

Each achievement criterion is defined using crisp sets since  $C_{jmin}(P_i), C_{jmax}(P_i) \in R$ . The vague sets thus defined give the possibility to compare the projects as well as to select the project that corresponds with the greatest accuracy to some criteria of

realization and selection of the projects.

**Definition b):**  $C_{jmin}(P_i)$ ,  $C_{jmax}(P_i) \in R$ . The fuzzy triangular number is its fuzzy subset of the form if its function of affiliation has the following form:

$$\mu_{C_{jmin}}(P_i) = \begin{cases} 1 & \text{if } V_i(P_i) = C_{jmax} \\ 1 - \frac{V_i(P_i) - C_{jmax}}{C_{jmin}} & \text{if } C_{jmax} \leq V_i(P_i) \leq C_{jmax} + C_{jmin} \\ 0 & \text{if } V_i(P_i) \geq C_{jmax} + C_{jmin} \end{cases}$$

**b1) Minimum criteria:**

$$\mu_{C_{jmax}}(P_i) = \begin{cases} 1 & \text{if } V_i(P_i) = C_{jmax} \\ 1 - \frac{C_{jmax} - V_i(P_i)}{C_{jmin}} & \text{if } C_{jmax} - C_{jmin} \leq V_i(P_i) < C_{jmax} \\ 0 & \text{if } V_i(P_i) \leq C_{jmax} - C_{jmin} \end{cases}$$

**b2) Maximum criteria:**

**Table 1:** Parameters and criteria for carrying out investment projects used in accordance with the multicriteria algorithm with fuzzy logic (MAFL)

Investment project	Criterion	Minimum value of the criterion (Cjmin)	Maximum value of the criterion (Cjmax)	Oradea - Arad highway	Oradea - Satu - Mare highway	Oradea - Deva highway
				P1	P2	P3
Total investment cost - million Euro - criterion 1	Minimum	1100.00	1000.00	1043.77	1061.46	3222.65
Operating and maintenance costs - million euros - criterion 2	Minimum	400.00	300.00	323.57	329.05	999.02
Updated net cash flow - Euro mil. - criterion 3	Maximum	200.00	250.00	222.52	226.13	215.60

Source: made by the author

For each project ( $P_i$ ) it will be possible to determine the degree of belonging  $\mu_{C_j}(P_i)$  to the achievement criterion  $C_j(P_i)$ . High values of the degree of belonging close to 1 show that the project corresponds to the achievement criterion. Small values of the degree of belonging close to 0 show that the project corresponds to a small extent to the achievement criterion.

**Step 3** - This step involves testing the multicriteria algorithm with fuzzy logic.

The matrix of the degree of belonging of the three projects to the criteria of realization of the projects, respectively for each project. A project is considered qualified if it meets the values of the minimum and maximum achievement criteria.

The value of the overall degree of belonging shows the way in which the projects correspond to the criteria formulated by the beneficiary. A high value of the overall degree of affiliation shows that these projects comply more accurately with the restrictions imposed by the three criteria.

After performing the calculations, the matrix of the degree of belonging of the offers to the selection criteria of the following form results:

$$A_1 = \begin{pmatrix} 0,9602 & 0,9411 & 0,8626 \\ 0,9441 & 0,9274 & 0,8807 \\ 0,0000 & 0,0000 & 0,8280 \end{pmatrix}$$

The column vector for the global degree of belonging corresponding to the projects is presented as follows:

$$\mu_g P_i(C_j) = \begin{pmatrix} \min \mu_{C_{1j}}(P_1) \\ \min \mu_{C_{2j}}(P_2) \\ \min \mu_{C_{3j}}(P_3) \end{pmatrix} = \begin{pmatrix} 0,8626 \\ 0,8807 \\ 0,0000 \end{pmatrix}$$

The selected project is the one that has the maximum value in the column vector for the global degree of belonging corresponding to the projects (inference).

$$\max \mu_g P_1(C_j): \mathbf{max} \begin{pmatrix} \min \mu_{C_{1j}}(P_1) \\ \min \mu_{C_{2j}}(P_2) \\ \min \mu_{C_{3j}}(P_3) \end{pmatrix} = \mathbf{max} \begin{pmatrix} 0,8626 \\ 0,8807 \\ 0,0000 \end{pmatrix} = 0,8807$$

#### 4. Conclusion

The selected project is P2 (Construction of the Oradea - Satu - Mare Highway) according to the application of the multicriteria algorithm with fuzzy logic (AMLF) which assumes that the selected project is the one with the maximum value in the column vector for the global affiliation corresponding to the projects (inference). The column vector contains the minimum values on the three lines of the matrix of the degree of belonging of the three projects to the implementation criteria. It must be maintained that the Oradea - Deva highway project has two criteria that do not fall within the limits assigned to  $C_{jmin}$  and  $C_{jmax}$ , therefore it receives the value 0 for these two criteria. Even if the P1 project (Oradea - Arad highway construction) has higher values at the criteria C1 (total investment cost) and C2 (maintenance cost) it has lower values than the P2 project (Oradea - Satu - Mare) regarding the updated net cash flow.

MALF is a tool with fuzzy logic that can select a project that is most effective taking into account certain criteria that the decision maker decides to consider. In this situation, specific criteria for financial analysis were used because the emphasis was on cash flows.

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# EUROPEAN FACILITY FOR RECOVERY AND RESILIENCE - EUROPEAN UNION FINANCIAL INSTRUMENT TO MITIGATE THE NEGATIVE EFFECTS OF THE COVID-19 CRISIS

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## **Abstract**

*The European Union has decided to set up a temporary financial instrument for the period 2021-2027 – Next Generation EU, worth € 750 billion, separate from the EU's long-term budget, the Multiannual Financial Framework (MFF). Its main purpose is to provide support to Member States to meet the challenges posed by the Covid-19 Crisis and its economic consequences. The European Recovery and Resilience Facility is the mainstay of Next Generation EU and has a total budget of € 672.5 billion. In order to use the European Recovery and Resilience Facility financing instrument, each EU Member State must develop its own Recovery and Resilience Plan (PNRR) which sets out its priority areas for investment in order to exit the crisis, revive the economy and increase resilience. The Recovery and Resilience Plan that Romania is now developing is a Strategic Document that sets out the investment priorities and reforms needed for recovery and sustainable growth, related to the green and digital transition envisaged by the European Commission.*

**Keywords:** European facility for recovery and resilience, national recovery and resilience plan, Covid-19, Next Generation EU, economic recovery

**JEL classification:** O10, O21, O52

## **1. Introduction**

Next Generation EU is a € 750 billion temporary recovery tool designed to help repair the immediate economic and social damage caused by the coronavirus pandemic.

It is based on three pillars:

- tools to support Member States' efforts to recover, remedy the consequences of the crisis and emerge stronger from this challenge;
- measures to stimulate private investment and support businesses in difficulty;
- strengthening key EU programs to build on the lessons learned from the crisis, increase the strength and resilience of the single market and accelerate the dual green and digital transition.

The European Resilience and Recovery Facility is the central element of the Next Generation EU Instrument, with EUR 672.5 billion in loans and grants, available to support reforms and investments undertaken by European Union countries.

The aim is to mitigate the economic and social impact of the pandemic and to make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities offered by the transition to a green economy and the digital transition.

## **2. Literature review**

Chara Vavoura, Ioannis Vavouras (2021), in his work “Sustainable economic development in the European Union and COVID-19” presents the evolution of the sustainable development process in the European Union (EU). Over time, the concept of sustainable development as a broad policy goal has steadily declined in

importance, leaving room for the less multidimensional strategy of green growth. The findings imply that both the social and environmental dimensions of sustainability have lost ground, and the traditional goal of economic growth is being restored. The second objective of the paper is to provide an assessment of the impact of the coronavirus pandemic on the EU's sustainable development process. Given the relevant EU forecasts of the immediate effects of the pandemic, it was concluded that it would seriously hamper the EU's short-term sustainability process. The long-term effects of the pandemic cannot even be outlined, especially at the level of individual Member States. However, the effectiveness of the Recovery and Resilience Facility, as a key tool of national recovery and resilience plans, will play a crucial role in minimizing or even neutralizing the long-term negative effects of the coronavirus pandemic.

Based on the case study of Portugal, Anabela M. Santos (2021) in *Linking the "Recovery and Resilience Plan" and Smart Specialization. The Portuguese Case* aims to analyze the alignment of investments in the Portuguese "Recovery and Resilience Plan" with the priorities of the Smart Specialization Strategies (2021-2027) of this territory and then identifies opportunities for potential synergies and complementarities between financing instruments. With the information available in the Plan and its Annex, a detailed analysis is carried out to identify investments capable of enhancing Research & Development and Innovation and/or to improve regional innovation ecosystems. The analysis shows that up to 6 billion euros in the plan (37%) can directly and indirectly support smart specialization in Portugal. However, the effect of such a contribution will largely depend on the final beneficiaries, the selected projects, the absorption capacity and the governance model. The paper also explains the relevance of Smart Specialization in the recovery of Covid-19 and writes some policy recommendations.

### 3. European Facility for Recovery and Resilience - European Union financial instrument to mitigate the negative effects of the Covid-19 crisis

Of the € 750 billion earmarked for Next Generation EU, the European Commission has allocated € 672.5 billion to the recovery and resilience facility to fund recovery and resilience plans being developed by EU Member States.

The European Resilience and Recovery Facility budget consists of:

1. grants of up to EUR 312.5 billion;
2. loans of up to EUR 360 billion.

**Table 1:** Grant allocations by Member States - Recovery and resilience plan (billion EUR, current prices)

	70% allocations	30% allocations	Total
<b>Belgium</b>	3.6	2.3	5.9
<b>Bulgaria</b>	4.6	1.6	6.3
<b>Czech Republic</b>	3.5	3.5	7.1
<b>Denmark</b>	1.3	0.2	1.6
<b>Germany</b>	16.3	9.3	25.6
<b>Estonia</b>	0.8	0.2	1.0
<b>Ireland</b>	0.9	0.1	1.0
<b>Greece</b>	13.5	4.3	17.8
<b>Spain</b>	46.6	22.9	69.5
<b>France</b>	24.3	15.0	39.4
<b>Croatia</b>	4.6	1.7	6.3
<b>Italy</b>	47.9	21.0	68.9

<b>Cyprus</b>	0.8	0.2	1.0
<b>Latvia</b>	1.6	0.3	2.0
<b>Lithuania</b>	2.1	0.1	2.2
<b>Luxembourg</b>	0.1	0.0	0.1
<b>Hungary</b>	4.6	2.5	7.2
<b>Malta</b>	0.2	0.1	0.3
<b>Netherlands</b>	3.9	2.0	6.0
<b>Austria</b>	2.2	1.2	3.5
<b>Poland</b>	20.3	3.6	23.9
<b>Portugal</b>	9.8	4.1	13.9
<b>Romania</b>	10.2	4.0	14.2
<b>Slovenia</b>	1.3	0.5	1.8
<b>Slovakia</b>	4.6	1.7	6.3
<b>Finland</b>	1.7	0.4	2.1
<b>Sweden</b>	2.9	0.4	3.3
<b>EU-27</b>	<b>234.5</b>	<b>103.5</b>	<b>338.0</b>

Source: [https://ec.europa.eu/info/files/recovery-and-resilience-facility-grants-allocation-member-state\\_ro](https://ec.europa.eu/info/files/recovery-and-resilience-facility-grants-allocation-member-state_ro)

The current maximum financial allocation is indicative based on the Commission's economic forecasts for autumn 2020 for real GDP growth in 2020 and 2021. The 30% allocations will be revised by June 2022, based on data on the actual result from Eurostat.

The amount available for grants is EUR 312.5 billion at 2018 prices, which corresponds to EUR 337.96 billion at current prices. The difference is due to the standard conversion from 2018 to current prices, calculated by applying a fixed deflator of 2% to the annual value of commitments.

The Recovery and Resilience Facility will provide EUR 360 billion in loans, in addition to the EUR 312.5 billion in grants. Member States may apply for a loan of up to 6.8% of gross national income in 2019 as part of the recovery and resilience plan submission.

Romania's PNRR has a total value of over 29 billion euros, composed of EUR 14.2 billion in grants and EUR 14.9 billion in loans. This funding will support the implementation of key investment and reform measures contained in Romania's Recovery and Resilience Plan and will crucially contribute to Romania's exit from the COVID-19 pandemic.

The rule set out in the proposed Regulation (still being negotiated at European level) is that 70% of grants will be committed by the end of 2022, the deadline for accessing the 30% grant difference being 31 December 2023. In addition, payments for the projects to be included in the national recovery and resilience programs must be completed by December 2026.

PNRR refers to a coherent package of public investments and reforms proposed based on the Country Specific Recommendations 2019-2020. These reforms and public investment projects must be implemented by 2026.

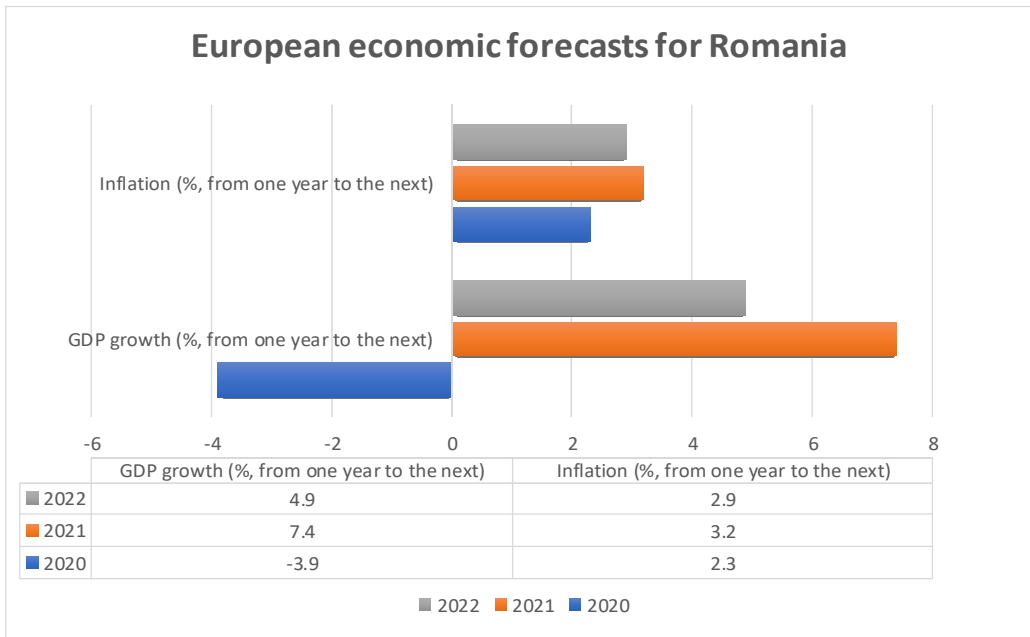
PNRR is based on 6 main pillars and 15 priority areas for Romania's development.

**Pillar 1. The green transition** is divided into 6 priority areas:

- Water management system;
- We forest Romania and protect biodiversity;
- Waste management;
- Road, rail and other sustainable modes of transport;

- Renewal Wave Fund;
- Renewable energy and hydrogen gas infrastructure;
- Pillar 2. Digital transformation** distributed in the priority area:
  - Government cloud and digital public systems;
- Pillar 3. Smart, sustainable and inclusive growth** is distributed in 2 priority areas:
  - Fiscal reforms and pension system reform;
  - Support for the private sector, research, development and innovation;
- Pillar 4. Social and territorial cohesion**, distributed in 2 priority areas:
  - Local fund for the green and digital transition;
  - Tourism and culture;
- Pillar 5. Institutional health and resilience**, is distributed in 3 priority areas:
  - Health;
  - Social reforms;
  - Public sector reform, increasing the efficiency of justice and strengthening the capacity of the social partners;
- Pillar 6. Policies for the new generation**, provides a priority area:
  - Educated Romania.

Europe's recovery from the economic, financial and social consequences of the COVID-19 pandemic is of vital importance to Romania's economic interests. According to the interim economic forecasts for the summer of 2021, the EU and euro area economies are expected to grow by 4.8% this year and by 4.5% in 2022. The European economy is expected to recover faster than previously expected, Romania's economy will grow by 7.4% in 2021 and 4.9% in 2022. (Source: [https://romania.representation.ec.europa.eu/strategie-si-prioritati/planul-de-redresare-pentru-europa\\_ro](https://romania.representation.ec.europa.eu/strategie-si-prioritati/planul-de-redresare-pentru-europa_ro))



**Figure 1:** European economic forecasts for Romania (July 2021)  
 Source: [https://romania.representation.ec.europa.eu/strategie-si-prioritati/planul-de-redresare-pentru-europa\\_ro](https://romania.representation.ec.europa.eu/strategie-si-prioritati/planul-de-redresare-pentru-europa_ro)

#### 4. Conclusions

Next Generation EU will provide 29.2 billion euros to stimulate the green and digital transition and build a more resilient economy in Romania.

Romania's National Recovery and Resilience Plan (PNRR) was positively evaluated by the Council of the European Union on October 28, the last stage at the level of the European institutions. Thus, Romania has at its disposal 29.2 billion euros, by 2026, from the European Union, for modernization through reforms and essential investments. On the same day, the recovery plans for Estonia (EUR 969 million) and Finland (EUR 2.1 billion), based on grants, were also approved.

This funding will support the implementation of key investment and reform measures contained in Romania's Recovery and Resilience Plan and will crucially contribute to Romania's stronger exit from the COVID-19 pandemic.

The Commission assessed Romania's plan on the basis of the criteria set out in the MRR Regulation, examining, in particular, whether the investments and reforms contained in the plan support the green and digital transition, contribute to effectively addressing the challenges identified in the European Semester and strengthen growth potential, job creation and Romania's economic and social resilience.

In the next period, the first funds, respectively 13% of the non-refundable amount allocated to Romania, will arrive in the country in the form of a pre-financing granted by the European Commission.

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# THE REAL ESTATE MARKET: PANEL DATA ANALYSIS. EVIDENCE FROM THE BUCHAREST STOCK EXCHANGE

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**Abstract:** *The coronavirus pandemic has left its mark on the Romanian economy further affecting all social and economic activities for long time to come. In this global framework characterized by lack of control and appropriate means to combat the spread of the virus, the Romanian authorities tried to manage using their own resources and experience in order to cope with the health crisis. The aforementioned, form the landscape in which we want to analyze the evolution of two important macroeconomic indicators and their influence upon companies from the real estate sector, listed on the Bucharest Stock Exchange. By using an econometric model, we analyzed the correlation between firms' turnover – as dependent variable – and GDP, along with unemployment rate – as independent variables. Econometric results indicate that the variables considered in the model are significant statistically.*

**Keywords:** Bucharest Stock Exchange; real estate sector; stock market performance; panel data regression model; pandemic.

**JEL classification:** I15; L10; R30

## 1. Introduction

The social distancing measures imposed by authorities worldwide have reconfigured the cost of living and consequently, the value of housing for individuals. "Housing" has always represented a delicate subject due to its functions: it can be a long-term investment; it can represent a store of wealth and can also be used as collateral for lending. Based on the above, residential markets have represented the basis of the world's worst economic and financial crises, underlining the linkage between the dynamic of real estate prices and the financial and macroeconomic stability of a country (IMF, 2019). This principle is supported by the financial crisis of 2007-2008, caused by the exponential rise in real estate prices due to financial liberalization. Following the crisis, the real estate market in Romania has undergone changes in order to face market destabilization. As mentioned before, the market represents an important risk source for financial and economic stability and is therefore closely monitored by national and European authorities. For instance, since 2016, Romania has undergone a phase of expansion of the housing market activity (National Bank of Romania, 2017) thus, the dynamics of the real estate market, especially the residential sector, must be carefully monitored in the current epidemiological context, to prevent possible negative effects on the national macroeconomic stability.

## 2. Literature review

The current economic and social context marked by the coronavirus pandemic is unprecedented for the current generation. Due to its novelty, very few studies investigate its impact upon the real estate market, and those that do exist mainly examine the USA markets (D'Lima et al., 2020; Liu & Su, 2021), China (Huang et al., 2020), Italy (Del Giudice et al., 2020). The common conclusion of the studies was that residential real estate markets were the most affected during the lockdown period due

to the decrease in housing demand, new home listing and volume of housing transactions.

For Romania, the conclusion is the same due to the unsustainable increase of housing prices, together with the growth in construction volume and credit.

A study conducted by Mattarocci and Roberti (2020) argues that both residential and commercial sectors were heavily impacted by site-visit limitations imposed by authorities, leading to lower income of households and lower revenue for commercial tenants. Also, the remote-working imposed relocation for many households and offices, mainly outside city centers because of greater affordability and lower infection risk due to lower population density.

According to an article published by Lalaine Delmendo (GlobalPropertyGuide, 2021), "Romania's house prices continued to rise, albeit at a slower pace, amidst a struggling economy due to the pandemic. During 2020, the average selling price of apartments in Romania rose modestly by 2.44% y-o-y, a sharp slowdown from an annual growth of 8.23% in 2019, being it's weakest growth since 2014."

According to the National Institute of Statistics (INS), data shows that "residential building permits in Romania fell by 4% from a year earlier to 37,781 after a slight y-o-y decline of 0.4% in 2019 and annual growth of 2.6% in 2018 and 7.6% in 2017."

According to CBRE's market outlook, at the end of H1 2021, Romania's total investment volume amounted to EUR 303.6 mln, 21% below the level registered during the first six months of the previous year.

### **3. Study objectives and methodology**

The article aims to provide a first view on the causal relationship between GDP and unemployment rate and their effects on the real estate market from Romania by examining the sustainability of the development in the real estate sector before, and during the pandemic. The analysis will be conducted on 10 companies listed on the BSE - from the AeRO market (Alternative Exchange), which operate on the real estate sector. The timeframe in which the analysis will be conducted is between the years 2015 and 2021, using half-yearly data, thus obtaining 13 observations.

We will examine companies' evolution by constructing a regression model via Eviews 7 software using panel data. The dependent variable is turnover whilst the independent variables are GPD and unemployment rate.

### **4. Data analysis and discussion of results**

As mentioned, the following data is used for the study: turnover, GPD and unemployment rate. Companies' financial data was collected from the BSE website, while GDP and unemployment rate values were collected from Eurostat website. To have the same unit of measurement, the data used was standardized using the standardize function in Excel software. A test was necessary to determine what type of regression should be estimated. Following the results, the Eviews software suggested that the null hypothesis that the individual effects are null should be rejected, thus the LSM estimator being displaced and inconsistent. Furthermore, the Hausmann test was conducted to decide which of the models is more efficient. According to the results generated, a probability which exceeds the allowed significance threshold was registered, thus the regression model with fixed effects will be used.



Dependent Variable: TURNOVER  
 Method: Panel Least Squares  
 Date: 11/05/21 Time: 16:17  
 Sample: 1 130  
 Periods included: 13  
 Cross-sections included: 10  
 Total panel (balanced) observations: 130

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.15E-16	0.022758	5.05E-15	1.0000
GDP	0.083062	0.027293	3.043311	0.0029
UNEMPL	-0.065151	0.027293	-2.387062	0.0186

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.938411	Mean dependent var	1.37E-17
Adjusted R-squared	0.932670	S.D. dependent var	1.000000
S.E. of regression	0.259481	Akaike info criterion	0.227495
Sum squared resid	7.944958	Schwarz criterion	0.492191
Log likelihood	-2.787205	Hannan-Quinn criter.	0.335050
F-statistic	163.4484	Durbin-Watson stat	1.883175
Prob(F-statistic)	0.000000		

**Figure 1:** Analyze for correlation between turnover and macroeconomic indicators  
 Source: Authors' elaboration using Eviews 7 software.

The output generated shows that 93.84% of the variation in turnover is explained by GDP and unemployment rate. Furthermore, we can observe that the independent variables register a probability of less than 0.05, which implies that the results are positive and statistically significant.

Regarding the errors, the Durbin-Watson Test has registered a value of 1.8831, close to the value of 2, which also shows that there is strong evidence of a positive serial correlation.

By generating the histogram, the Jarque-Bera test was conducted, and registered a value of 1199.98 and a probability of 0. This probability shows that the alternative hypothesis is accepted, namely, the errors are not normally distributed.

In other words, if the GDP would increase by one unit, the turnover would also increase by 0.083 units and if the unemployment rate would increase by one unit, the turnover would also increase by 0.0651 units.

## 5. Conclusions

As we find ourselves on a steppingstone, it remains to be seen the long-term impact of the COVID-19 pandemic on the Romanian investment market. Therefore, the effects of the current crisis will be clearer in the longer term. For the real estate market of Romania, prior to the econometric analysis, we compared the results registered by the companies. Thus, for 2020 and the 1st semester of 2021, all companies registered reduced turnover values compared to the same period of the previous year, these being the negative effects of the pandemic. Regarding the net profits registered, for half of the 10 companies included in the analysis, the net profit was negative in at least one of the semesters between 2020 – H1 2021.

Regarding the independent variables used, the GDP also registered reduced values in the years 2020 and 2021 compared to the same period of the previous year. At the

opposite pole, the unemployment rate registered the highest increase between H2-2019 and H1-2020 (from 3.9% to 5.4%).

The panel regression analysis undertaken showed that there is a positive and statistically significant relationship between the used variables. A stronger relationship could be observed with GDP rather than with the unemployment rate. The increase in the unemployment rate in the last 2 years has had an apparent positive effect on the turnover registered by companies in the real estate field.

Despite the fall of results registered, as well as their reduced activity in the end of H2-2020, the following year presented a recovery for the companies.

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# THE RELATIONSHIP BETWEEN PUBLIC EXPENDITURE ON EDUCATION AND EARLY SCHOOL LEAVERS

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**Abstract:** *This paper aims to measure public spending on education as a determining factor that has an impact on economic growth and social development, an analysis of the allocation of funds for education and to reveal whether there is a correlation between public spending on education and early school leaving. Investing in the education and training of young people to adapt existing working conditions and the sustained efforts of states in areas such as research, development and science would contribute to the development of new technologies and knowledge. The development of new technologies and knowledge contributes to increasing the country's competitiveness on the global market. Of course, there are extensive discussions and studies that suggest that quantity is not enough, but the quality of education also matters. Therefore, the proposed solution would not be the uncontrollable increase in spending, which is impossible, but the rationalization and control of spending on education to be reflected in increasing the economy and quality of life.*

**Keywords:** education; funding education; expenditure on education; early school leaving; economic growth; public investments;

**JEL classification:** I220; I240; I250;

## 1. Introduction

Education is a key factor in economic growth and social development. Plays a significant role in individual and societal progress and is essential for personal development and well-being. Investing in education offers long-term benefits to citizens, publicly funded institutions and the knowledge-based economy as a whole. The Lisbon Strategy of 2000 clearly recognized the fundamental role of education and training in Europe's social and economic development. In recent decades, the link between the ability of European countries to invest in human capital through education and training systems, and their ability to promote high levels of sustainability and sustainable growth, based on knowledge and social cohesion, has been highlighted, repeatedly in several important European Union policy documents. For example, the Council Resolution on education and training as key factors in the Lisbon Strategy emphasized "the contribution of education and training not only in promoting employment, competitiveness and innovation, but also as an important supporting factor of social cohesion, active citizenship and personal fulfillment"(Official Journal of the European Union, 2007).

There is a significant correlation between the availability of national financial resources, measured in terms of Gross Domestic Product (GDP), and the expenditure for all levels of education. The relationship between total spending on education and GDP provides an indicator of the priority of spending on education over other components of the economy, so we set out to see if the allocation of larger funds in education would influence the early school leaving rate.

## 2. Literature review

These aspects have been analyzed over time through numerous researches.

Eurydice and Cedefop's (2014) report highlights the importance of understanding the problem in order to reduce early school leaving. Prevention of this phenomenon could be costly in itself, as it involves changes in education systems as well as related policy areas, but social and economic benefits will far outweigh the costs to society, not to mention the benefits to citizens in terms of personal and economic well-being (European Commission, 2011).

As reported by Masca, S.G. (2014), the results on composites indicators allow to place Romania above average in terms of public sector efficiency, but in a very heterogeneous situation in structure: total public spending is highly efficient in generate economic performance, while it is highly inefficient in insuring stability in the same period 2001-2012.

As mentioned by Bors, Octavia (2020), in the context of the rapid decline of the population, early school leaving will compromise Romania's future growth prospects. Romania faces challenges at the level population, which requires a balance between policy reforms in education and the economy. A national strategy to reduce school dropout is needed to ensure a coherent and coordinated approach, while achieving the ambitious targets of the national agenda and the Europe 2020 strategy.

The paper "Perspectives On Education In Romania In The Context Of Europe 2020 Strategy" reveals the Europe 2020 strategy by which the target of the 27 eurozone states was the 10% early school leaving rate, and Romania's target was 11,3%. In 2019, Romania was quite far from the proposed target: 15.3%.

The Agreement on Technical Assistance Services for Capacity Building and Budgeting and Supporting the Introduction of Budgeting on Performance Criteria (2019) specifically addresses "increasing access to early childhood education and care (EITC) and quality education for all". Thus, the allocation of funding should also involve a responsibility of school management.

## 3. Methodology research

This project aims to identify the evolution of Expenditures allocated to education as a percentage of GDP (CPIB) and the Early School Leaving Rate (RPRS) for the period 1997-2019, as well as the statistical correlation between the two indicators.

Considering the expenditure for education as a key resource for reducing early school leaving, I used the following objectives for the analysis.

The main objective of this methodology is:

O: Determining the connection between budget allocation strategies in education and the rate of reducing early school leaving;

Our purpose in this study was to determine whether education expenditures significantly influence the early school leaving rate or whether there are factors other than the financial allocation of funds for schools

General hypothesis: CPIB influencens RPRS, so there is a significant link between CPIB and RPRS;

The study is based on data from 1997-2019, taken from the European Institute of Statistics Eurostat and National Institute of Statistics. The nature and characteristics of variables used in the model are summarized in Table 1.

The estimation of the parameters of the regression model that uses the early school leaving rate (RPRS) as an independent variable and the value of Public Expenditure on Education (CPIB) as a dependent variable was done automatically (Eviews software). The Least squares method was implemented as a method for estimating

the model parameters, being necessary to define the two variables (CPIB and RPRS) and the free term (C).

**Table 1:** Variables used in the econometric model

VARIABLE	STATISTICAL EXPRESSION	DESCRIPTION
CPIB	Direct variable	General government expenditure on education (current, capital, and transfers) is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to government. General government usually refers to local, regional and central governments.
RPRS	Indirect Variable	Early school-leavers are individuals below the statutory school-leaving age who have withdrawn from or left an education or training programme without completing it.

Source: made by author

The observation method and statistical analysis were applied to these data to confirm or not the research hypotheses.

#### 4. Results of research

From the distribution of the series it is observed that it is not a symmetrical series.

From the calculation of Pearson's asymmetry coefficient  $\alpha = \frac{\bar{X} - M_0}{\sigma_x} = 0,8235$ ,

$\alpha > 0$ , it turns out that it is the case of a positive or left asymmetry.

The econometric model shows the existence of a direct linear link between the two indicators, which allows the use of the Simple Linear Regression Model to study the dependence between the value of public spending on education and the rate of early school leaving by young people, but the degree of correlation intensity  $R_{y/x} \leq 0,5$ , the connection between X and Y is weak;

Using Fisher Test it results that  $F_{calc} < F_{tab}$  the null hypothesis (H0) cannot be rejected, but there is no connection between variables, at the level of the total population.

Given the value of  $R^2 < 50\%$ , the RPRS factor is not significant influencing the variation of public expenditure on education, the rest of the factors being other variables not taken into account in the study presented.

Testing the significance of the parameters using the Student Test  $|t_{calc}| > t_{tab}$ , the hypothesis H0 is rejected, alternative H1 is accepted, the model is valid.

Regarding the Durbin Watson test it is observed that:  $4 - D_U < D_{Wcalc} < 4$  resulting in a negative autocorrelation.

#### 5. Conclusion

Analyzing the obtained results, the following aspects are found:

- There is a direct link between the two indicators analyzed, respectively if the expenditures for education increase, the rate of early leaving the educational system decreases;
- Even if theoretically, from a statistical point of view, values for public spending on education can be predicted, in reality, these values depend on government policy;

- The results of the education system are quite difficult to quantify, which requires increased attention to the allocation of funding, as well as to the monitoring and evaluation of expenditures in the field of education.

Regarding the construction of a strategy for early school leaving in Romania, although in general terms, the importance of environmental factors is recognized family (employment opportunities, family income, parents' level of education, responsibilities of children in the household, etc.), and this is reflected in nomination of students with low socioeconomic status as a target group of the measures proposed. Also, 11.61% of the estimated cost for implementing the strategy is allocated for the financial support of students and parents, measures that address directly the economic situation of the students.

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## THE INTENSITY OF ATMOSPHERIC EMISSIONS IN A GREEN ECONOMY

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**Abstract:** *Over the last decade, EU countries have become increasingly concerned about environmental issues. They have become a significant factor in transforming the world economy. In this context, governments have sought to focus all financial and material efforts to achieve Sustainable Development Goals. The intensification of climate change required the recovery of the world economy after the pandemic and the emphasis on economic growth, as well as the strategic desire for energy and resource independence. In the transition to a green economy, reducing greenhouse gas emissions has become a key element. Climate change adaptation and mitigation policies have an increasing influence on accounting policies. Adaptation measures, such as the design of green financial instruments, the revision of supply chains, technological and managerial changes in economic activities, the introduction of national greenhouse gas emissions trading systems, have caused various controversies. The purpose of this article is to highlight the importance of the air emissions. As a matter of fact, their evolution was showed not only for EU-27 perspective but also from the Romanian point of view. With other words the air emissions evolution can seriously affect overall economic growth*

**Keywords:** Greenhouse gas emissions, Air emissions accounts, Climate change, Emissions trading, Green Economy.

**JEL classification:** Q5, Q01, Q56

### 1. Introduction

More and more scientists are using the term "climate crisis" instead of "climate change" to emphasize the seriousness of the problem and the need to address it as closely as possible. The climate crisis is an excessively rapid change in climate due to rising global average temperatures. One cause is due to air emissions.

The issue of climate change is no longer just a matter of environmental protection. This is an issue that affects economic issues. One of the most important measures to adapt to climate change is to reduce greenhouse gas emissions. This will prevent the negative consequences that may arise in the future. The European Union is fighting emissions and putting pressure on governments to regulate this situation. Thus, each country must form its own greenhouse gas accounting system and create its own emissions trading system. In other words, calculating emissions is not enough to help reduce them.

So either a carbon tax is imposed or an emissions trading system is introduced. The emissions trading system is a more flexible mechanism that not only taxes polluters, but also encourages those trying to reduce them.

## **2. Literature Review**

Climate change is the major challenge of our time, and adaptation to climate change has become an urgent necessity. One of the most common causes of pollution are atmospheric emissions. Dispatched into the atmosphere, contaminants may touch the soil „as a result of wet or dry deposition of particles, at a rate dependent on their capacity and density” (Anabela Cachada, Teresa Rocha-Santos, Armando C. Duarte, 2018).

On the other hand, air emissions are the physical flow of gaseous or granular materials from the national economy (production or consumption processes) to the atmosphere (as part of the environmental system) (INSTITUTUL NAȚIONAL DE STATISTICĂ, 2020).

Greenhouse gases present in the atmosphere are dissimulated by chemical compounds. Earth's atmospheres are stroked by gasses that allow shortwave radiation or sunlight to heat the oceans and land. They can be produced by natural processes and by human activities (Doll & Baranski, 2011).

Greenhouse gases (GHG) are natural and anthropogenic gases which absorb and emit radiation with wavelengths specific to the infrared spectrum emitted by land surface, atmosphere, and clouds. The Kyoto Protocol covers the main greenhouse gases: Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and three groups of F-gases: Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>) (INSTITUTUL NAȚIONAL DE STATISTICĂ, 2020).

## **3. Reducing greenhouse gas emissions in the European context**

One of the most ambitious environmental goals is climate neutrality. In order to successfully achieve climate ambition and economic development, European countries must implement a series of measures such as ensuring sustainable growth, liberalizing energy markets, implementing energy efficiency measures and educating individuals and companies in terms of resource management.

Reducing greenhouse gas emissions is one of the main challenges today. The EU has set several climate changes targets to be achieved in till 2050. The Union is firmly committed to the right path to achieving its 2020 targets, but the same cannot be said in relation to its – more ambitious – targets for 2030 and 2050. The Commission's Green Pact presented in 2019 proposed to move toward a target of reducing emissions, as well as a target of zero net greenhouse gas emissions in 2050 (Curtea de Conturi Europeană, 2020).

The EU emissions trading System (EU ETS) covers emissions from around thousands of power plants and plants, as well as from air transport (European Commission, 2020).

In 2019, greenhouse gas (GHG) „emissions decreased by 3,7%”, while the EU economy continued to increase, EU-27 greenhouse gas emissions. Compared to 1990 levels, they decreased by 24% according to the harmonized greenhouse gas inventory (GHG). Including emissions, land use change, forestry results and removals from land use in a net reduction of a quarter from total emissions, EU remains on track to meet its GHG emissions reduction. In 2019, emissions decreased compared to 2018. As a result, EU GHG emissions have reached their lowest level since 1990. The GHG intensity of the economy, defined as the ratio of emissions to GDP, fell to 282 g CO<sub>2</sub>/euro equivalent in 2015, which is less than half of the 1990 level (European Commission, 2020).

The main factor in reducing CO<sub>2</sub> emissions is electricity generated from renewable energy sources. In this regard, a way must be found to offset harmful emissions that



cannot be avoided. An eloquent example would be the reduction of energy consumption for production processes and the use of recyclable sources.

The crisis caused by the COVID-19 pandemic is expected to lead to an unprecedented decrease in emissions in 2020. The EIAV estimates „an 8% decrease in global CO<sub>2</sub> emissions in 2020”. The Carbon Monitor led by an international research consortium, estimates that EU-27 emissions „fell by 11% in the first half of 2020 compared to the same period last year”. However, as in the past, a rapid economic recovery can lead to a strong and rapid increase in emissions, unless policies direct stimulus measures towards the green transition (European Commission, 2020).

#### **4. Methodology and Results**

The main purpose of this paper is to emphasize the intensities of air emissions in Romania compared to the EU27 average. The research was based on analysing the information provided by Eurostat databased since 2008 to 2019. Furthermore, it was used as method the qualitative approach driven by observation and comparison.

In the analysis carried out according to Eurostat, the data set shows the intensity links that connected emissions to economic parameters (value added, production). Thus Regulation (EC) No 691/2011 on European Environmental Economic accounts (EEA) concerns only air emission accounts. The EEEA currently includes six modules (air emissions accounts, environmental expenditure accounts, economy-wide material flow accounts, environmental goods and services sector accounts and physical energy flow accounts, environmental taxes per economic activity,) (INSTITUTUL NAȚIONAL DE STATISTICĂ, 2020).

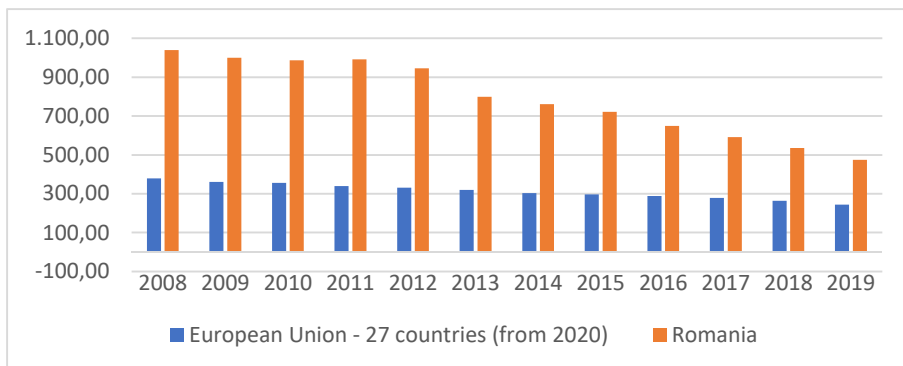
##### **4.1. Evolution of the intensity of the air emissions**

Over time the projections for the calculation of atmospheric emissions have been adapted to the harmonization of the national system of environmental indicators with the Eurostat basis. The analysis of the carbon status for the period 2008-2019 has been calculated as gross value added and the unit of measurement considered is gram per euro in relation to current prices.

According to the chart below in the European Union countries, the highest figure was reached in 2008 in the amount of 378.71 grams/euro, while the lowest figure was recorded in 2019 at 244.33 gram/euro. Regarding the situation of Romania, the peak was reached in 2008 by 1,039.49 grams/euro and the lowest level was reached in 2019 by 474.67 gram/euro.

As far as the trend in the European Union has a constant trend with no major fluctuations, however, for Romania it can be seen a downward trend which has suffered some shocks. It can be noted that Romania is surpassing exponentially the European Union level by the lowest in the period 2012-2013 from 946.18 gram/euro to 799.01 gram/euro.

An explanation of the constant evolution of air emissions is that various basic factors affected the total production over time. In other words, a decrease in total national air emissions is due to the inefficiency of individual industries. Just as an increase in air emissions can be due to overall economic growth.



**Figure 1:** Intensity of air emissions in Romania compared to the EU 27  
Source: adaptation of the author according to Eurostat data

## 5. Conclusion

In conclusion, while the pressures for achieving the environmental objectives set by the European Union remain closely linked to steady economic growth is important to maintain strong principles.

Air emissions are influenced not only by the management of general industries, but also by structural economic changes which can lead to lower national air emissions. At an intensive level, emissions into air are losing weight in the economy precisely because of the low importance of so-called inter-industrial structural changes.

Over time, the changes that have affected both the economy and the environment have been caused by price volatility and this has been felt in emissions trading.

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## PRESENTATION OF FINANCIAL STATEMENTS BETWEEN IFRS AND US GAAP

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**Abstract:** *Accounting is often referred to as the “language of business”, It is a fundamental skill to be able to analyze the financial statements and what is behind an organization’s numbers. There are multiple similarities between US GAAP and IFRS when it comes to the presentation of financial statement, but there are some differences that affect what financial information is presented, how it is presented and where it is presented. This paper meticulously studies the main similarities and differences between US GAAP and IFRS when it comes to the presentation of financial statements. For example, regarding financial statement presentation, cosmetic differences include the use of the accounting equation ( $A=L+SE$ ) compared to ( $A-SE=L$ ), terminology, and order of liquidity. Findings indicate that there are some notable differences between the two, but they are not significant.*

**Keywords:** Accounting Standards; IFRS; US GAAP; Accounting Harmonization.

**JEL classification:** M40; M41; M48; E42.

### 1. Introduction

Accounting has been developed since long time ago, where every country has been interested in developing its own principles which can reflect the industry practices and contributions of accounting bodies established for this purpose, there have been leading countries in this area because of industrial development, including the United States of America, which knew a developed industrial sector in the beginnings of the last century which been reflected on the developing of the accounting profession.

The role of standards development was first assigned to the American Institute of Certified Public Accountants (AICPA), which undertook the task of developing what was known at the time as Generally Accepted Accounting Principles (US GAAP) (AICPA, 2021). (GAAP), which has been in operation since 1930. In recognition of the increasing complexity of the US economy in the 1960s and the need for accounting standards to keep abreast of the developments in this area, this led to the call for the establishment of an independent standards-setting body. In response to these demands, the responsibility for the development of the standards was transferred to a new body, the Financial Accounting Standards Board (FASB) in 1973 (FASB, 2021). On the other hand, at the international level, international accounting standards were established at the beginning of the 1950s after the Second World War because of the very economic integration of such cross-border flows. It has become necessary to rely on a unified language for the preparation of financial statements to give the investor the ability to compare these lists and based on which he can decide. Using different accounting frameworks in different areas becomes a problem for both companies and investors. To that end, it was necessary for countries to abandon their accounting frameworks and use one framework to reduce the problem of variation (UNITED NATIONS, 2008). Considering these circumstances, the International Accounting Standards Committee (IASC) was established in 1973 and then the international

Accounting Standards Board (IASB) in 2001 to work on the development of a single, high-quality set of international accounting standards (IASB, 2021).

## **2. Presentation of Financial Statement**

According to EY annual book, in terms of financial statement format, US GAAP and IFRS guidelines are quite comparable. A statement of financial position, a statement of profit and loss (income statement), a statement of comprehensive income (either a single continuous statement or two consecutive statements), a statement of cash flows, and accompanying notes to the financial statements are all included in a complete set of financial statements under both sets of standards. Both US GAAP and IFRS necessitate the presentation of changes in shareholders' equity. However, US GAAP permits the presentation of changes in shareholders' equity in the notes to the financial statements, but IFRS mandates the presentation of changes in shareholders' equity as a separate statement. Furthermore, unless under exceptional circumstances, both require the financial statements to be prepared on an accrual method of accounting. The ideas of materiality and consistency that companies must examine in producing their financial statements are comparable in IFRS and US GAAP. The degree of detailed instruction offered tends to be where the two sets of criteria differ. (EY, 2021)

EY summarized the differences, US GAAP requires the presenting of three years, IFRS requires just 2 years. There is no general requirement for the layout of the financial statements for US GAAP, but IFRS has a list of minimum line items. Under US GAAP Short-term loans are classified as long term if the entity intends to refinance the loan on a long-term basis, under IFRS they cannot be reclassified to long-term liabilities. There is no general requirement within US GAAP to classify income statement items by function or nature, but for IFRS Entities may present expenses based on either function or nature. Under US GAAP discontinued operations classification is for components that are held for sale or disposed of and represent a strategic shift on an entity's operations, but under IFRS is for components that have been disposed of or are classified as held for sale, and the component: represents a separate major line of business. Is part of a single coordinated plan to dispose of a separate major line of business. Is a subsidiary acquired exclusively with a view to resale, US GAAP has no requirements for disclosure of performance measure, but IFRS has a specific requirement on how and when they are provided. US GAAP doesn't require third balance sheet while IFRS requires it in specific conditions (EY, 2021).

## **3. Case study**

It is critical for the reader to have a thorough grasp of the differences between US GAAP and IFRS. Below figures shows the difference between both standards in real numbers.

When comparing US GAAP to IFRS income statements (Figure 1), there are variations in presentation and categorization. The term "operating revenue" is replaced by the term "revenue." Operating revenues under US GAAP contain several miscellaneous revenue components that are categorized as other income, net under IFRS. The line-item Share of the profit (loss) from equity accounted investments is now included as part of Total revenue and income. The amount of Share of the profit (loss) from equity accounted investments is different after the presentation change as discontinued operations are included in the amount; IFRS does not have a line-item Discontinued operations in the financial statements. The line item Other income, net,

comprises some miscellaneous revenue items and gain or loss on sale of property, plant and equipment and investments previously reported as part of Other operating expenses.

	US GAAP	IFRS
Operating revenues	196,234	
Revenue		201,283
Share of the profit (loss) in equity accounted investments		990
Other income, net		1,470
Total revenue and income		
Raw material and energy expense	98,961	82,810
Employee benefits expense / Payroll and related costs	19,404	19,546
Depreciation and amortization expense	16,937	17,215
Impairment of non-current assets / Impairment losses	5,228	5,492
Other	3,481	23,670
Total expenses / Operating costs and expenses	144,010	148,733
Operating income	52,224	
Earnings before financial items and tax		55,010
Financial income (expense), net	1,785	
Financial income		1,425
Financial expense		(43)
Financial income (expense), net	1,785	1,382
Equity in net income of non-consolidated investees	962	
Other income (expense), net	53	
Income before tax / Income from continuing operations before taxes and minority interest	55,024	56,392
Income tax expense	(37,598)	(38,459)
Minority interest	(202)	
Income from continuing operations	17,224	
Income from discontinued operations	167	
Net income	17,391	17,933
Net income attributable to minority interests		273
Net income attributable to equity holders of the parent		17,660

**Figure 1:** Consolidated income statement US GAAP to IFRS

Source: [www.hydro.com](http://www.hydro.com)

	US GAAP	IFRS
<b>Assets</b>		
Cash and cash equivalents	6,760	6,760
Short-term investments	15,020	15,020
Accounts receivable	25,608	34,508
Inventories	16,497	16,497
Other current assets / Prepaid expenses and other current assets	14,025	7,980
Current deferred tax assets	3,099	
Assets held for sale / Current assets held for sale	1,122	3,691
Total current assets	82,131	84,457
Investments accounted for using the equity method / non-consolidated investees	10,455	10,690
Property, plant and equipment	124,976	119,075
Intangible assets	4,861	11,475
Financial assets		4,914
Other non-current assets / Prepaid pension, investments and other non-current assets	7,763	303
Deferred tax assets	1,239	2,177
	2,569	
Total non-current assets	151,862	148,635
Total assets	233,993	233,092
<b>Liabilities and equity</b>		
Trade and other payables		29,785
Bank loans and other interest-bearing short-term debt	3,213	3,655
Current portion of long-term debt	441	
Provisions		2,197
Taxes payable		18,995
Other current liabilities	55,550	7,949
Current deferred tax liabilities	1,134	-
Liabilities included in disposal groups / Current liabilities in disposal groups	738	1,011
Total current liabilities	61,076	63,591
Long-term debt	19,619	19,619
Provisions		14,357
Pension obligation	12,391	12,605
Other financial liabilities		353
Other liabilities	16,126	2,702
Deferred tax liabilities	27,307	23,265
Long-term liabilities in disposal groups	273	
Total non-current liabilities	75,715	72,900
Total liabilities		136,491
Minority shareholders' interest in consolidated subsidiaries	707	
Share capital	4,708	4,708
Additional paid-in capital	9,736	9,736
Other reserves / Accumulated other comprehensive income (loss)	(9,135)	(1,533)
Retained earnings	97,811	89,544
Treasury shares	(6,624)	(6,624)
Equity attributable to equity holders of the parent / Shareholders' equity	96,496	95,831
Minority interest		771
Total equity		96,601
Total liabilities and equity / shareholders' equity	233,993	233,092

**Figure 2:** Consolidated balance sheet US GAAP to IFRS

Source: [www.hydro.com](http://www.hydro.com)

When it comes to Balance Sheet (Figure 2), short-term receivables that were formerly categorized as part of other current assets under US GAAP are now classified as Accounts Receivable. VAT receivables and other external prepaid goods make up most of these short-term receivables. Under US GAAP, capitalized exploration costs were classed as part of Property, plant, and equipment, but are now classified as intangible assets. Non-current financial assets have been reclassified from other non-current assets and are now shown on the face of the balance sheet. Shares held for trading are classified as part of Short-term investments with a fair value. Non-marketable shares previously classified under US GAAP as not held for trading are classified as available-for-sale under IFRS with changes in fair value booked against equity. The shares are presented in the balance sheet as part of Financial Assets. Non-marketable shares in the US GAAP balance sheet were classified as prepaid pension, investment and other non-current assets, and measured at cost. The IFRS statement of cash flows is very similar in presentation and format to the US GAAP statement of cash flows, with only four presentation, classification or measurement differences related to them measurement of cash, Classification of capitalized interest, presentation of capitalized capital maintenance and presentation related to Assets held for sale.

#### 4. Conclusion

There are many similarities between US GAAP and IFRS when it comes to the presentation of financial statements. Even with these similarities the differences are still recognizable and effective to the results of the financial statements. This study examined the main differences between US GAAP and IFRS in financial statements presentation. The finding of this research concluded that there is a significant difference in presenting financial data between US GAAP and IFRS, main differences were in the income statement and balance sheet. For example, US GAAP doesn't require third balance sheet while IFRS requires it in specific conditions. While statement of cash flows is very similar in presentation and format in IFRS to the US GAAP. Finally, In the case study, coverage of IFRS methodology is addressed, and the most likely financial statement differences between US GAAP and IFRS are examined and listed which approves the differences between both accounting systems.

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## THEORETICAL APPROACH REGARDING THE NECESSITY AND IMPORTANCE OF FINANCIAL REPORTING

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**Abstract:** *In the context of a constantly expanding economic entity, constant development aims at new performance standards for companies that need to go beyond the economic area. Moreover, the need to integrate into the development strategy the aspects ensured the sustainability of the development of activities through economic, social harmonization and at the same time to achieve ecological objectives. Sustainability is an area of growing interest and directing organizations' attention in this direction is essential. The Non-Financial Report brings both short-term and long-term benefits. The general objective of this article is to highlight the importance of non-financial reporting in creating value for companies and analyze the influence on the performance of organizations. In conclusion, the need for non-financial reporting and its challenges help to the identify opportunities to create value for companies.*

**Keywords:** non-financial reporting; performance; value; sustainability; key performance indicator.

**JEL classification:** M14; M40; M49.

### 1. Introduction

An organization needs to strengthen itself in the global economy by carefully designing trade policies to achieve success and sustainability in the industry. Human resources are vital for any organization, and proper management of human resources can help an organization achieve its goals, thus being the leading indicator of non-financial performance.

This paper will begin by delimiting the area and the research object. Thus, the first stage will be to establish a general area of research. In the next stage, the emphasis will be mainly on presenting the results on the review of the efficiency and importance of non-financial reporting for companies, analyzing the opportunity and its challenges in creating value for companies.

The motivation for choosing this theme comes from the desire to deepen the concept of non-financial reporting. This concept of non-financial reporting is relatively new in Romania; for this reason, I consider it a topical issue in the existing economic context, which is beginning to arouse more and more interest among companies. There are many papers in the international literature on the role and importance of non-financial reporting.

Regarding the research methodology for the selected topic, I consider it essential to know the current information, which is complemented by quantitative and qualitative research, to obtain the answers that this topic raises.

To highlight the current state of knowledge and understanding of the topic proposed for research, we selected the essential aspects, theories, and visions that can have a relatively significant impact on the research topic.



## 2.2 Literature Review

### 2.1. Conceptual delimitations regarding non-financial reporting

In the context of the analysis of the non-financial performance of an economic entity, emphasis should also be placed on the side of internal processes, the development of which is essential for achieving long-term performance (Ng and Nudurupati, 2010). It focuses on all the key activities necessary for the company to excel, delivering the value expected by customers both productively and efficiently. (Armstrong & Baron, 2004).

Measuring and communicating the impact on the economy, society, and the environment is therefore much more than a legal obligation, more than a published non-financial statement, it is the new way of business, which brings to society that will make it a series of benefits, and they will ultimately ensure market resilience and long-term profitability (Alekseeva et al., 2021).

There is a need, therefore, for the development of knowledge, skills, and tools, for the allocation of financial and human resources necessary to carry out a correct and complete reporting process, which should include:



**Figure 1:** The cycle of development of knowledge, skills, and tools  
Source: Own processing

Economic strategy and activities do not provide information on quality or innovation. Only financial indicators cannot determine the impact of services provided to customers, either the impact on the environment or the impact on the human factor (Didier, 2002). In this context, concluding on the financing strategy that a large company such as the one studied in the paper must adopt must support the growth of added value while respecting a structure of equity and liabilities appropriate to the risks and benefits of the business (Freeman et al., 2008). The financial side is necessary for corporate growth and ensuring the long-term existence of the company. The annual investment requirements must represent a significant percentage of the total turnover for the development to be a continuous one and for the investors to be satisfied (Bartoli & Blatrix, 2015).

The current crisis has revealed the ability to face the adverse effects and find solutions innovation to continue the activity, even if at a different pace. Therefore, managers and government institutions must work together to restart savings, the role of

professional accountants in reporting change. Moreover, the adjustments made in the activity of each entity are significant.

The challenges posed by the coronavirus pandemic and the economic crisis that will likely follow will be varied. There is no adequate "treatment scheme" that could be applied to avoid economic and social sequelae. The reports prepared within the economic entities will have a double role: the public ones, which aim at (non) financial reporting, will contribute to increasing the confidence of trades shares, and confidential ones, intended for management, will help to make relevant decisions.

## **2.2. The company's orientation in creating value**

Management must be geared towards creating added value. For the studied economic entity, this means the sustainable increase of the value of each business unit and the corporation. To achieve this is necessary to assess risks and opportunities responsibly and continuously to achieve the goal of adding value. Thus, management is responsible not only to investors but also to all stakeholders. Due to their contributions to the existence, performance, and long-term evolution of an organization, stakeholders become its partners. They have certain expectations of the company, and managers must assume specific responsibilities to meet these requirements, thereby compensating for financial, non-financial investments or the risks to which the stakeholders are subject. Stakeholders thus become goals, and their needs are reflected in the entity's objectives. The strategic importance of stakeholders and the need to manage relationships with them ("stakeholders management") to focus on the balance between their needs and expectations and those of organizations (Nidumolu, Prahalad & Rangaswami, 2009). This concept dethrones the monopoly of financial capital, placing it in a relatively equal position with these parties that have significant contributions necessary for the performance and development of the value of organizations, such as employees, customers, suppliers, and the social environment (Neely, Adams & Kennerley, 2002).

In addition to quarterly reporting and preparation for European electronic reporting, companies need to keep up with several other non-financial reporting requirements, which can directly impact financial reporting.

According to the European Directive 2014/95 / EU on non-financial reporting (NFRD), companies with more than 500 employees have so far been required to submit an assessment of the impact of their work on the environment, the treatment of employees, respect for human rights, social aspects eradication of corruption and bribery but also ensuring diversity.

In June last year, a new regulation appeared at EU level 2020/852, applicable to all financial reports published from 1 January 2022 for the previous year (2021).

## **3. Conclusion**

Therefore, the more efficient a company is, the higher the value it offers. The two concepts, performance, and value, dominate, as we stated earlier, the modern management of organizations, so to achieve superior performance requires a rethinking of all processes involved in the mechanism of value creation (Folan, Browne & Jagdev, 2007). Overall performance is at the heart of the strategic value that provides financing and value to shareholders. It is what keeps the "distance" from competitors on a long-term development logic. This performance must be maintained at the level of all members (Hall, 2011). At the same time, globally, the issue of performance allowance to the institutionalization of sustainability and development

within the organization—however, only good management of the measures by which performance can be maintained guarantees multi-dimensional objectives. Creating value for all stakeholders is a complex task but limiting economic the creation and measurement of economic value is not enough. Pursuing value creation for stakeholders extends the management control framework, which leads to new value creation capabilities and the overcoming of conflicts (Ion, 2010).

In conclusion, to survive in a constantly changing environment, a company must ensure that all actions taken will create value, reasoning appreciating performance through the cost-value ratio, respectively by the fruition within the company of those actions or activities meant to bring added value.

These issues serve as future directions for research, given that the non-financial reporting process is constantly evolving.

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# ARTIFICIAL INTELLIGENCE IN FINANCE AND ASSET MANAGEMENT

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**Abstract:** *The aim of this paper is to draw the attention upon the use of Artificial Intelligence (AI) techniques in Finance and Asset Management. Managing to creep up in aspects of our lives that we might have never thought about, AI has slowly, but surely, found its way into Finance as well. This paper will present some of the ways in which AI has and will continue to change the fields of Finance and Asset Management, how AI techniques stack up against the classical (Markowitz, 1952) framework, the downsides of this technology and further research opportunities that can aid in advancing this field.*

**Keywords:** finance; asset management; artificial intelligence; machine learning; stock market; natural language processing.

**JEL classification:** C38; C45; C53; C55; C61; C63; C69; C89; G11; G12; G17; G19.

## 1. Introduction

Being mentioned as a concept in early 20th century literature, and then being thought as a mathematical concept by Alan Turing in his 1950 paper *Computing Machinery and Intelligence* (Turing, 1950), Artificial Intelligence (AI) was born as a research field back in 1956 at Dartmouth College, more specifically at the *Dartmouth Summer Research Project on Artificial Intelligence* (Anyoha, 2017). Since then, the field of AI has had many ups and downs throughout the time. Around the 2010s, the discipline has seen a new boom attributed to the growing capabilities of computers and cost reductions in the hardware needed to run them, as well as the access to massive volumes of data that could be used by AI algorithms (Council of Europe, n.d.).

## 2. AI in finance

Being a disruptor of many industries, finance was no exception. With applications in algorithmic trading, portfolio construction and optimization, robo-advising and fraud detection, AI is used by hedge funds, banks, regulators and insurance companies alike (Buchanan, 2019). According to (Buchanan, 2019), the most affected area is believed to be the asset management one, where it's expected that the largest number of job cuts will occur. This is due to the fact that a growing number of companies are using AI to facilitate and improve their asset management process.

The advance of AI has made it easier and cheaper to optimize the facets of portfolio management than ever before, and this is only to improve as time goes on. Whereas before hundred thousand dollars of equipment and highly trained specialists were needed, now the advantages of AI are becoming more and more available for anyone to use.

## 3. AI in portfolio management

The ability of AI to process and analyze massive amounts of data and to discover the different correlations that they have, ensures that this method can be used to enhance

the several facets of portfolio management. More specifically, AI can be used to extract information more efficiently from both structured and unstructured data, to generate more accurate predictions, to validate and to back test risk models, to name a few. Fundamental analysis and quantitative analysis can be both improved with the assistance of AI programs. On the fundamental analysis front, AI algorithms can investigate different macroeconomic factors to discover influences that they have on stocks that could be introduced in a portfolio if analyzing bottom-up, or to discover the influences on the economy and economic sectors that affect individual stock price performance if the analysis is done top-down (Blackrock, 2019). Regarding the quantitative analysis front, AI can be used to improve the shortcomings of classical portfolio selection and construction techniques through generating better estimates for the risk and expected return of both assets and portfolios.

#### **4. AI and the classical Markowitz framework**

According to (Markowitz, 1952), the process of selecting a portfolio may be divided in two stages. The first stage starts with observation and experience and ends with beliefs about the future performances of available securities and the second stage starts with the relevant beliefs about future performances and ends with the choice of portfolio. Various aspects of this framework can be improved using Artificial Intelligence. For example, (Prado, 2016) has replaced the variance-covariance matrices with hierarchical cluster analysis that uses all the information in the covariance matrix but requires less estimates, leading to more stable and robust portfolio weights. Empirical evidence in his study using simulated return observations suggests that a minimum variance portfolio built using this approach has a 31.3% higher Sharpe ratio than those built with the (Markowitz, 1952) framework.

#### **5. Methods of AI**

Artificial Intelligence is a broad field that has many subsets which can be used in finance, as well as asset management. *Machine Learning (ML)* is a subset of the data science field that uses statistical models to draw insights and make predictions. The main advantage of ML algorithms is that they learn solutions and inferences from prior experience, without the need of being explicitly programmed to find specific relations (Didur, 2018). *Natural Language Processing (NLP)*, as the name suggests, has the ability to process natural language, such as text or audio. NLP can be used to extract valuable information from different sources, such as social media websites, news articles or company quarterly reports to generate better investment decisions. With uses in forecasting and predictions, *Artificial Neural Networks (ANNs)* is a network of connected nodes, modeled after the brain's neurons. ANNs receive a set of training data as an input and the desired output and based on those it learns the relationships between them and how to get to the output. Afterwards, it can be used to predict the output of never seen before inputs. *Decision Trees (DTs)* and *Random Forests (RFs)* are used in forecasting and classification. DTs and RFs are built automatically based on training data and the desired output and can classify data based on characteristics. Another method that can classify data is the *Cluster Analysis*. Used to classify assets, Cluster Analysis divides the data in different clusters based on the similar characteristics. Those clusters can be specified by the user, or they can be automatically determined by the algorithm. *Support Vector Machines (SVMs)* are algorithms used for classification or regression of assets with applications in forecasting. Being faster to train than ANNs, SVMs can also handle nonlinear relationships between variables. To optimize portfolios that cannot be optimized using classical algorithms, Evolutionary Algorithms can be used. Being inspired by the

natural evolution, these algorithms can search through enormous, complex and nonlinear sets of solutions to find those that are most suitable for the problem at hand. Lastly, the Least Absolute Shrinkage and Selection Operator (LASSO) is a regression model that penalizes the algorithms to ensure that they are using the smallest number of exogenous variables possible. LASSO enhances the out-of-sample performance of the model by reducing the spurious coefficient estimates to zero (Motahari, 2020).

## **6. The downsides of AI**

Artificial Intelligence does not come with its drawbacks. It is not perfect and there is significant room to improve, even the most advanced AI that is available today is considered weak by the computer sciences and academic communities (Blackrock, 2019). The first disadvantage of the AI models is that they are often very complex and opaque. This disadvantage makes them very difficult to understand and to scrutinize in case something goes wrong. The second disadvantage comes from the fact that they are very reliant on the data that they are provided. The principle of “garbage in, garbage out” applies to AI as well. Training an AI model using incomplete or poor-quality data will result in a model that can do more harm than good. However autonomous the AI algorithms may be, due to the fact that this technology it is not as advanced as it could be, it still needs specialized human supervision to avoid grave mistakes that could lead to stock market disasters.

## **7. Further research opportunities**

Touching on the issue of further research needed to advance the field of AI in Finance and Asset Management, I would like to point out some of the research paths that I would like to undertake in the future to help further develop these fields. Living in the information age, NLP comes to mind in aiding us in analyzing, interpreting, and making sense of enormous data streams. From textual analysis of company reports and news articles, to voice and video analysis, NLP can help us categorize positive and negative sentiments regarding an asset, industry or economic conditions that will in turn affect various asset prices. Textual analysis of specific corporate jargon could be easily identified and categorized using NLP techniques and Central Bank Chairs’ speeches could be analyzed through the words used or even the tonality of their voices and facial expressions to further help understanding the bigger picture regarding economic conditions and in turn, asset prices. Other ML techniques can be used to identify which indicators, factors or in short, features, could be used as relevant predictors in our analysis or even find new data points never thought about in other analyses. The world of Asset Management being a large one, there are several pieces of the puzzle that I deem worthy of research to help in the completion of the bigger picture. Here I just named a few. But I am sure that the road of knowledge is ripe with opportunities ready to be discovered.

## **8. Conclusion**

Even though it has its origin in the 1950s, Artificial Intelligence is still considered an emergent domain with a great deal of improvement needed to reach its full potential. Being used in an ever-expanding number of fields, AI has and will continue to change our lives in many ways, asset management being no exception. I believe that there is no better time than now to research and improve the techniques of Artificial Intelligence in the finance and asset management fields, for I believe that those that can adapt and innovate through the powers of AI will be those who will thrive in the world of tomorrow, and those that will keep relying on decades-old techniques will be left behind as there have been many times in history of this happening. Further

research in this field will help to get rid of the existing shortcomings, improve existing methods as well as discover new ones.

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# THE IMPACT OF RISKS ON INSURANCE COMPANIES IN PALESTINE

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**Abstract:** *The study aims at clarifying the risks facing the insurance industry in Palestine in recent times and the most one is Inflation. In this study, a literature review has been made in order to understand the subject matters in the impact of Inflation on insurance companies in Palestine. After exploring the results of the previous specialty literature, the research findings show that all the Palestinian insurance companies experience inflation and inability to keep up with increasing prices without government approval, and because Israeli occupation distorts the Palestinian economy there is an economic dependency on Israelian occupation and there is a lack of experience in risk management. Some recommendations are made for decision-makers in the insurance business sector to Create legal facilities in Palestinian law in order to help insurance companies keep up with increasing prices and reduce the impact of inflation Also, company decision-makers are required to work continuously to develop risk management in their companies.*

**Keywords:** Risk management; Insurance companies; Inflation; Risks; Palestine.

**JEL classification:** G32; G22; G10; G32.

## 1. Generally Introduction

The Palestinian economic institutions are facing a very complicated situation because of the Israeli occupation, as they are exposed to many risks and a state of uncertainty in their insurance industries, which suffer from a state of inflation due to the COVID-19 pandemic and the general rise in prices and global transportation prices, which affected not only the insurance companies but also all aspects of the economy.

## 2. Research Problem

Insurance companies in Palestine are currently facing many risks related to inflation that prevent the process of developing the insurance industries sector, and the study tries to answer the main question: Do insurance companies in Palestine face the risk of inflation that prevents them from developing and how we can solve it?

## 3. Research objectives

The study aims to highlight the importance of the insurance industry in Palestine and to clarify the inflation that faces insurance companies due to the COVID-19 pandemic and provide recommendations to manage all the risks in order to solve all their problems and improve insurance industry sector.



#### **4. Research Methodology**

The current study uses a theoretical presentation of previous literature that shows the risks facing the insurance sector including inflation. The researcher has followed a qualitative method in reviewing the previous literature that shows the great importance of risk management in the insurance sector. It also presents the continuous need to gain more knowledge about risk management, its steps and some possible current risks.

#### **5. Literature review**

Afoun, H(2014) study indicates that insurance companies play the role of insuring risk for other financial institutions, and therefore they manage the risks of these companies in light of the complex condition which they face, and the insurance companies need to adopt practical steps and depend on a set of models that enable them to manage the risks that threaten them, which enables them to succeed and continue. Shaheen et al.'s (2020) study aimed at clarifying the relationship between sustainable risk management and risk management of the institution and Palestinian insurance companies. The results showed that there is a positive relationship between risk management and the use of corporate risk management with increased profitability, where profits increase with the use of improved risk management strategies. The study also shows that there are many risks, including risks affecting the profit due to the political instability and the unsuitable prices that do not correspond with the current economic situation, caused by inflation

Qazat,A(2009) study indicates that there is a weakness in the laws related to insurance and a low awareness of the insurance risks facing companies, including inflation, which must be dealt with through the management of human resources in companies and their rehabilitation to deal with risk management

Dickens et al. (1997) showed that large-sized companies are exposed to many risks, and therefore costs are high for technology-related risks or computer risks, and the study also indicates that there is a poor relationship between insurance brokers and insurance companies because of the product as there is a failure to meet the technology-related needs due to technology risks, caused by inflation

Recent research conducted by Shad et al. (2019) investigated the implementation of enterprise risk management by focusing on the additional value in business performance and its relation to sustainability that is integrated within the business strategy. It followed a qualitative analysis to measure performance and its effect on risk management on the business level. The results of the study can be summarized in the fact that improving business performance is achievable through customizing reduce inflation

Rajab et al. (2011) study of the impact of spending policy on inflation in Palestine indicates that the policy adopted by the government to address the problem of inflation failed due to the economic dependency of the Israeli occupation. And it recommends getting rid of the economic dependency of the Israeli occupation and the government should pay more attention to spending on investment and support insurance companies.

Wang et al.'s (2019) study indicated the risks that could reduce the profitability of insurance companies, as 214 companies were analyzed between 2006 - 2018 in America, and the result of this study was that operational risks are one of the most important risk factors that must be studied and paid attention to in risk management.

Insurance companies must focus on operational risks and risks that caused by inflation.

The study indicates that the inflation rate in insurance can be calculated in two cases: The first case refers to the payment of the cost of the document in one payment so that the inflation rate is fixed or estimated

The inflation rate is fixed, it will affect the value of the insurance and be an advantage for the insured

But in the event that the inflation rate is estimated here, the long-term estimation of the inflation rate is dealt with through statistical methods

In the second case, the cost of the policy shall be paid in an annual installment during the term of the policy so that the inflation rate is fixed or estimated

In the event that the inflation rate is fixed, the first payment is used to repay the document, and the other payment is used for investment

In the event that the rate of inflation is estimated, the inflation is estimated through statistics and computerized programs

In the end, the study indicates that investment-related documents help to solve the problem of inflation and recommend directing human resources to deal with new risks constantly,

## **6. Result and Discussion**

Insurance companies in Palestine lack experience in managing risks and have failed to face the risk of inflation resulting from the COVID-19 pandemic and are unable to take decisions to confront the general rise in prices in the insurance industry sector due to Palestinian laws that limit the powers of insurance companies without any government intervention

The inability of the Palestinian citizen to keep up with the high prices of the insurance policy. We emphasize that the insurance industry must pay attention to the steps of risk management, especially the identification, evaluation and control of risks in order to improve the reduce inflation of the insurance company (Crovini et al., 2020). There are many tools to control and manage risks, including risk transfer to insurance networks which is the best way to reduce. (Rejda et al., 2014) in addition to risk control, by avoiding, preventing, and reducing risks.

Palestinian insurance companies suffer from a very complicated economic situation due to the economic dependence on the Israeli occupation. In the case of economic independence, the companies will be able to control inflation and the process of economic development will take place in all aspects of the Palestinian economy.

## **7. Conclusion**

After studying the previous literature which studied the risks facing the insurance industry in Palestine in recent times and the most one is Inflation. it was noticed that there is insufficient interest in this field. So, here this study unites the efforts to increase awareness of the role of the insurance industry in Palestine.

The research question was answered and the goals were achieved by emphasizing that insurance companies in Palestine face the risk of inflation that prevents them from developing and the Palestinian economy dependency on Israeli occupation and there is a lack of experience in risk management. Therefore, the recommendations are that the decision-makers in the insurance business sector are required to be fully

aware of the influence of the risk management has on helping their business flourish through qualifying workers in the insurance sector to deal with risk management. Also, they have to work continuously to develop the insurance industry and reduce inflation.

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## ERM - Risk Modeling Based on a Risk Reserve Optimization

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**Abstract:** *The ERM spread within organizations, known as a feature of their objectives. The ERM gives the framework to manage objectives uncertainty, but also creates the premises to manage business continuity and disaster recovery. One of the issues is that, based on the risk model used, the organization builds its Risk Reserve, which is influenced by the impacts considered in the Risk Registry. It is important that the Risk Reserve estimate is as precise as possible; if the Risk Reserve is too big, it induces the organization to make large provisions, and if this is too low, could lead to the unpreparedness of the organization. The question is if we can create a risk model able to detect the changes in the organization, which are due to the structure changes such as intelligent economy implementation, and how this model will transpose these changes in organizational level indicators. We prepared a risk model based on four categories, from which the first three ones have a precisely determined impact, and only one category with some degree of uncertainty*

**Keywords:** Risk; statistics; ERM; reserve risk; corporate governance; uncertainty.

**JEL classification:** D81; G32.

### 1. Background

We want to measure risk in order to differentiate it, otherwise adverse selection can occur. The majority of non-financial industries has risk management and the need to report on it is crucial. An implemented risk management system is an important part of the decision-making process. From a long-term sustainability perspective, a strategic risk assessment system in place is designed to identify executive management perspectives on the long-term risk environment, on one hand, and on the other hand, to develop a risk reduction plan. Related to the medium term, the objective of the risk management system is to ensure the capacity to deliver positive economic value added by managing the risks to which the entity it is exposed and their potential impact on cash flow, within the limitation of the risk appetite. In this respect, stakeholders' concerns relate to financial goals such as return, growth, equity value, cash flow, financial stability. In addition, some non-financial goals like reputation, employee excellence, strategic initiatives, compliance, pricing and operational excellence become equally significant. In practice, risk assessment comprise quantitative measures linked to market capital, risk-adjusted return on capital, aggregate loss probability, liquidity scenarios correlated with specific risk tolerances, premium, prices vs. target, return on equity.

### 2. Methodology

Because risk has never been as actual as nowadays, the international community created the Committee of Sponsoring Organizations of the Treadway Commission

(COSO) a joint initiative dedicated to helping organizations improve performance by developing leadership that enhances internal control, risk management and governance. The definition of the risk management within the organization (ERM) envisages identifying potential events, which can impair one entity, handling risks within acceptable tolerance bound (risk appetite). The company aims to implement a risk management system according to domestic and international standards, namely ISO 31000. The standard is applicable to all kind of public or private organizations and insists on adapting RM to their needs and particularities. Implementing a risk culture in the organization joined with reserve risk optimization represents a building block towards entity objective achieving. First, we established the risk governance using the general defense borders such as organization structure, risk and compliance and on the top internal control. We applied a bottom-up approach starting with day-to-day activities, risk valuation and control measures projection. In the middle the compliance activity settled, based on methodological support, RM framework development and process supervision. The upper level of internal audit became crucial in RM process effectiveness valuation through which the two previous steps thoroughly analyzed provided independent opinions. We gathered general information about the entity under survey in our case the company considered is in O&G industry, owning a refinery and a gas station network. The organizational chart (Fig. 1) consists of a three-layer structure, out of which Risk management department is set out between executive management and administrative board.

An efficient risk management system carried out using Porter's Five Forces model meant to identify and analyze five competitive forces within an economy, aiming to determine an industry's weaknesses and strengths as well as the corporate strategy. The Five Forces model named after Harvard Business School professor, Michael E. Porter published in 1980 consists of competition in the industry, potential of new entrants into the industry, power of suppliers, power of customers, threat of substitute products. Our Porter model relies on the following structure:

**Table 1: Porter's Five Forces**

	<b>Competition in the industry</b>	
	External price pressure (OPEC, USA, Russia)	
	Offshore exploring enhancements	
<b>Suppliers</b>		<b>New entrants in the market</b>
Exploration services price rise	<b>Internal organization issues</b>	Fuel market new
Drilling services price rise	Production cost	Ecology
Field difficulties	R&D	
	Budget	<b>Substitute products</b>
<b>Customers</b>		<b>Legal</b>
Changing market/production preferences		Very strict legislation
Fuel preferences/changes		New technologies (injection)

Source: Anonymous Company

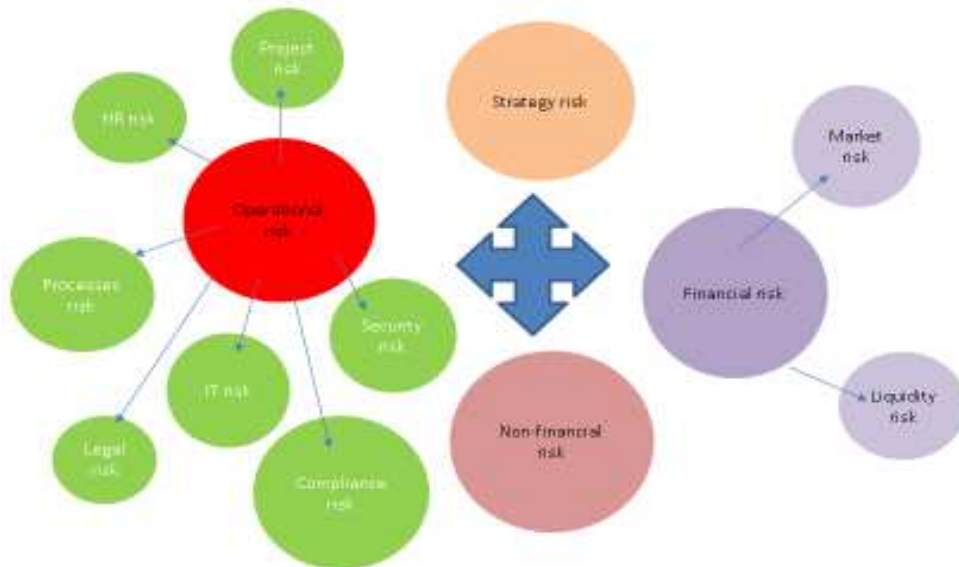
SWOT analysis supplements risk management system implementation. Strengths and weaknesses are usually internal identified (personnel, finance), while opportunities and threats are external, (macroeconomic conditions, technological change, legislation, culture).

**Table 2:** SWOT Analysis

<b>Strengths</b>	<b>Weaknesses</b>
Some RM elements already implemented	Limited team members readiness
Minimal infrastructure preexistent	Location area is diverse
<b>Opportunities</b>	<b>Threats</b>
Training system development in RM	Legal aspects
Visual entity recovery (accident reduction)	Specific training availability
	Pandemic development

Source: Anonymous Company

Based on the analysis the risk matrix derived four types of categories differentiated upon impact area including financial, non-financial, operational and strategy related. Taking into account the minimal preexisting RM infrastructure and the plan to optimize the reserve risk our matrix and registry risk revealed the most important challenges this industry faces.



**Figure 1:** Risks Clustering  
Source: Anonymous Company

### 3. Results

As a result, we got a model, which has reduced much of the uncertainty related to the residual impact, by dividing the risks into four categories, presented below (Table 1: ERM Categories Model). Objective's category based on the entity objectives with the

characteristic of presenting a full impact. This item equalizes the sum of the maximum impact of each of the company objectives (in money denomination). Asset category represented by the value of all the assets the company owns can have a maximum impact equal to the sum of values of all the assets within the company. Projects category comprises all the projects within the company, which after implementation, part of them would fall under the first category, and another part would fall under the second category. In this case, the maximum impact is set fix as well. Misc. (Miscellaneous) category sums up all the risks, which cannot fall under the previous categories, and has a component with associated uncertainty.

**Table 3: ERM Categories Model**

	<b>Objectives</b>	<b>Assets</b>	<b>Projects</b>	<b>Misc</b>
Maximum Impact	Sum of the impacts at the top of the risk trees (the organizational goals impacts)	Assets (fixed and current) value – from the Accounting Dept	Impacts given by the project objectives + impacts given by the implemented assets	Fines, spending with a low level of definition
Impact Details	Fixed amount related to the chosen objectives	Fixed amount	Fixed amount depending on the project nature	Random variable/amount
Notes	Usually there is an annual frequency for this category	The amount changes with the assets value registered in the Accounting	This category is a hybrid of the first two categories (objectives and assets)	This component generates the random part of the impact, but partially controllable and delimited

Source: Own research

#### 4. Conclusions

The model will be used to further study and determine company evolutions under the influence of external stimuli, as public policies, the global pandemic or other relevant event.

#### 5. Acknowledgements

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# BIG DATA ANALYTICS USAGE AND BANKING PERFORMANCE: A CONCEPTUAL FRAMEWORK

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**Abstract:** *Big data analytics is one of the latest digital technologies that enable application in various fields, especially in the banking sector. However, besides the relative advantage bringing by big data analytics, there are many barriers in terms of technical, organizational, and external environment factors. Therefore, this study aims to build a conceptual framework to analyze the factors affecting big data analytics adoption in banking sectors and its influence on banking performance. A conceptual framework will be proposed based on a combination of dynamic capabilities theory (DC), technology organization environment framework (TOE), and diffusion of innovation theory (DOI). The result of this study suggests that further empirical research should be conducted based on this proposed framework.*

**Keyword:** Big Data Analysis; Dynamic Capability; TOE Framework; Banking Industry; Innovation.

**JEL classification:** C55; O31; G21.

## 1. Introduction

Big data application has spurred an entirely new business model in many industries; the efficiency of big data implementation depends on many drivers and barriers: companies' technology infrastructure, data management, and analytic skills. According to Fosso, Akter, Edwards, Chopin, & Gnanzou (2015), big data's ultimate goal is to deliver business value and create a competitive advantage. For managers in large firms, the most impressive thing about big data is not how big data is, but the opportunities, benefits, and infrastructure requirements. Understanding the factors affecting the usage of big data analytics allows managers to recognize the benefits that big data brings to create a competitive advantage for the business while also taking measures to minimize the risks in adopting big data analytics. Notably, big data in the banking industry is forecasted to be one of the promising research topics in the future. However, while some electronic newspapers have been carried out on big data analytics in the banking industry, there is still little scientific understanding of which factors influence Big Data Analytics (BDA) usage and how BDA usage impact banking performance. Therefore, the main aim of this study is to develop a conceptual framework on this topic in the banking industry.

## 2. Literature review

### 2.1. Overview of theories

### 2.2. Combining DOI, TOE and DCT

In a study on big data analytics in banking from Hung, He, & Shen (2020), the dynamic capability is used as the theoretical basis for BDA usage and firm performance. Although RBV is the most-used theory in previous studies, in big data topics, the



assumptions about VRIN (Valuable, Rare, Inimitable and Non-Substitutable) in RBV are no longer satisfied (Braganza, Brooks, Nepelski, Ali, & Moro, 2017), then the impact of BDA on firm performance would be limited. In general, big data analytics aims to change the current resources themselves, thereby creating differences through new products, new services, and new operating processes. This BDA capacity is very consistent with the dynamic capability theory, so this study uses the dynamic capabilities theory as the foundation for BDA usage on firm performance. The concept of dynamic capabilities has now been greatly expanded compared to the original one. Helfat et al. (2007) emphasized dynamic capabilities associated with changes such as: creating new products, models, and production processes. To maximize the benefits of dynamic capabilities, firms need to fully evaluate firms' internal and external factors (organizational process, technological process, and external environments). *BDA usage* is a dynamic capability capable of exploiting, applying, and making the best change when considering internal and external aspects. This study conceptualizes BDA usage as a competitive capability facilitated by technical infrastructure resources, management support, and external support. These are the reason for the combination of the TOE framework with dynamic capabilities when studying BDA usage.

### **3. Building a conceptual framework**

#### **3.1. Factors influence BDA usage**

The flexibility in choosing factors for each industry is one of the advantages of the TOE. This study focuses on one factor from the technological dimension (*perceived benefits*), two factors from the organization dimension (*data analytics skills* and *data-driven culture*), one factor from the environment dimension (*government policy*), and two factors from Data dimension (*data quality* and *security and privacy issue*). These selected factors have been neglected or studied sparsely in previous research.

In the banking sector, big data analytics empowers banks or fintech to accommodate real-time solutions, perform better visualizations, broaden the user experience. Furthermore, BDA also enables banks and fintech to analyze risks more accurately on a large database and enables banks to identify frauds. Therefore, our study proposes that BDA investment will be made based on recognizing its benefits to the banking industry.

- *H1: perceived benefits are positively associated with BDA usage*

Staff knowledge and skills will be necessary to implement and maintain sophisticated BDA projects (Gangwar, 2018). In addition, big data analytical staff need to possess higher capabilities to work with new technical skills such as natural language processing, text mining, video/voice/image analytics, and visual analytics (Schultz, 2013). Therefore, this research hypothesized that:

- *H2: Data analytics skills are positively associated with BDA usage.*

According to a survey of mainstream companies in the top 1000 Fortune, organizational cultures become the most important obstacles in implementing big data initiatives (Randy Bean, 2021). The data-driven culture in the business refers to members from high-level managers to low-level employees who must use the results from data analytics in decision-making (Ross et al., 2013). This study suggests that businesses that build or aim to create data-driven culture will tend to use BDA in their activities to bring advantages to businesses. Therefore, this research hypothesized that:

- *H3: Data-driven culture is positively associated with BDA usage.*

A study by Park & Kim (2019) showed that among competitor, partners và government support & policy, only government support & policy have a significant impact on the adoption of BDA. Moreover, because big data solutions require a significant and long-time investment, open data policy and promotion policy would ensure sustainable legal framework for big data implementing (Park & Kim, 2019).

- *H4: Government support & policy is positively associated with BDA usage.*

A study by Maroufkhani, Tseng, et al. (2020) found that a lack of trust in outsourcing partners is the cause of firms' concerns about insecurity and uncertainty issues that harm BDA adoption. Big data analytics applications have a lot to do with personal and financial information; information insecurity causes anxiety in using BDA technology. Therefore, this research hypothesized that:

- *H5: Security and privacy issue concern is negatively associated with BDA usage.*

*Data characteristics imply the bigness of data in terms of volume, velocity, and variety.* When banks face the characteristics of big data, banks tend to use big data analytics to optimize what data brings (Ghasemaghaei, 2018). In addition, the development of technology and cooperation with third parties allows banks to have more data from different sources under different data types. A study from Lai et al. (2018) shows that as data becomes larger in volume, created at higher speed, and stored in a more diversified type, more enterprises tend to use BDA.

- *H6: Data characteristics are positively associated with BDA usage*

### **3.2. Impact of BDA usage and banking performance**

A study from Ghasemaghaei (2018) affirmed big data analytics's benefits of providing better products/services and improving customer service. Many big banks use big data to understand customers' awareness, perceptions, and satisfaction (Schultz, 2013). Through understanding more about customers, banks would be able to explore new markets more quickly, introduce new products or services into the market faster, achieve a higher success rate of new products or services, and gain a bigger market share than competitors.

Therefore, this research hypothesized that:

- *H7: BDA usage is positively associated with market performance.*

Using large volume, real-time data, and different data types could help firms provide better products/ services and enhance their efficiency than their competitors (Ghasemaghaei, 2018). Likewise, a recent report from MNB (Magyar Nemzeti Bank – Hungarian National Bank) also points out that most financial institutions expect AI, big data, and cloud technology to be the most significant impact on business processes (Magyar Nemzeti Bank, 2020). Furthermore, Belhadi et al. (2019) argued that using BDA helps improve intra-and inter-organizational transparency and accountability, helps managers make decisions more quickly and accurately, improves employees' efficiency. Therefore, this research hypothesized that:

- *H8: BDA usage is positively associated with operational performance.*

Risk management is one of the main functional differences for the banking industry compared to non-financial firms (Aebi, Sabato, & Schmid, 2012). The wave of big data analytics technologies applications will benefit risk managers at banks to make better decisions at a lower cost (Härle, Havas, & Samandari, 2016). Therefore, this research hypothesized that:

- *H9: BDA usage is positively associated with risk management performance.*

#### 4. Conclusions

The current study aims to build a conceptual framework to explain the factors influencing BDA usage in the banking industry. The findings from this research provide insights into the digital transformation path in the banking industry.

As far as we know, this research is the first conceptual study to apply big data analytics in the banking industry. Previous studies in the banking industry have addressed big data analytics in terms of opportunities and challenges or case studies. Previous empirical studies are proposed based on characteristics of other industries such as SMEs, manufacturing, value chains.

Unlike other industries, risk management is an important part of the banking industry, so the study proposes to assess the impact of big data analytics to answer whether and how big data analytics will impact risk management.

The conceptual model based on dynamic capability theory that assesses the impact of usage of BDA on banking performance is very suitable in the current volatile external environment.

Although the combination of the TOE and other theories has brought many factors into adopting BDA, it depends on the characteristics of each type of business domain to make appropriate adjustments. In this study, we hope to add to the stream of knowledge about new digital technologies in the banking industry. In addition, the study hopes to have more empirical research adding to the actual results.

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# SUSTAINABILITY AND PERFORMANCE IN REAL ESTATE. STUDY ON COMPANIES FROM NORTH-WEST OF ROMANIA

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**Abstract:** *The purpose of this research is to examine whether there is a positive or negative relationship between performance indicators and sustainable growth. The sustainable growth at the company level is analyzed during the pandemic, being thus influenced by external factors. In order to achieve the main objective of the paper, the analysis used descriptive method and multiple regression analysis, in which the independent variables are measurements of financial performance such as financial leverage, liquidity (current ratio) and asset efficiency (total asset turnover) and the dependent variable is the sustainable growth rate (SGR) of the company. The data of the research consists of 164 companies selected on the criterion of medium taxpayers from real estate sector of the North-West region of Romania. The results showed that an increase of financial leverage and liquidity have a negative impact effect on company's sustainable growth, while asset efficiency has a positive impact.*

**Keywords:** sustainable grow rate; leverage; liquidity; asset efficiency.

**JEL classification:** Q56; L25; O12; R11.

## 1. Introduction

With increasing pressure to increase sustainability, more and more companies are making progress in addressing the sustainability issues they face. Their performance in the sustainability process is evaluated by well-known consulting companies and in studies conducted by various researchers (Danciu, 2013).

There is a debate about the importance and application of sustainable development in a business environment and most of the existing literature focuses on the causality between sustainability of the company and financial performance, being a landmark for investors and other stakeholders to determine how well a company performs, in order to make correct and profitable investment decisions.

## 2. Literature review

There are several ways to correlate company performance with sustainable growth. For example, Șerban (2019) uses the Dow Jones Sustainable Index to correlate sustainability with performance indicators, classifying companies into several groups, with different results for each group. In 2021, the same author with his colleagues uses the environmental, social, and governance (ESG) sustainability scores of companies, as an indicator for measuring sustainability and the results shows that ESG has a strong, positive and direct impact on the evolution of company performance in the pharmaceutical sector. In 2020, Oprean-Stan et. all correlated the financial performance (ROA), market performance (Tobin's Q) and sustainable growth rate (SGR), as dependent variables with Environmental, social, and governance

(ESG) risk ratings, sustainability reporting (GRI), and controversial event involvement (CEI) as independent factors. They couldn't find evidence that performance is positively affected by sustainability reporting.

The concept of SGR is used by many researchers in various studies, such as Mamilla (2019) and the result of his study shows that there is a significant and negative relationship between SGR and financial leverage and asset efficiency, and a negative and significant relationship between SGR and liquidity. The results of Norfhadzilahwati (2017) in his study shows a significant and positive correlation between SGR and financial leverage and asset efficiency, but a not significant and negative correlation between SGR and liquidity.

In the study of Akhtar et. all (2021) the results reported a negative association among all measures of financial leverage and performance with SGR.

### 3. Data and methodology

The methodology used in this paper includes both qualitative and quantitative research methods like data analysis, descriptive method, and multiple linear regression.

The study sample consists of 164 companies from the North-West Region of Romania, selected on the criterion of their contribution to regional development, from real estate sector. The companies selected are from the nominal List of medium taxpayers administered by the General Regional Directorate of Public Finances Cluj-Napoca. In order to analyze the connection between variables, were used financial data of only 164 companies as availability of full data required by this study, from year 2020, provided by the companies' own websites and other open sources of information.

Therefore, the purpose of the hypotheses is to examine the relationship between financial leverage, liquidity, and asset efficiency with sustainable growth rate (SGR).

**Table 1:** Measurements of Dependent and Independent Variables

Type	Variable	Indicator	Measurement
Dependent Variables	Sustainable Growth Rate	SGR	$SGR = ROE * (1 - DPR)$
Independent Variables	Leverage Ratio	L	Total debts/ Total Equity
	Liquidity: Current Ratio	CL	Current Assets / Current Liabilities
	Asset Efficiency: Total Asset Turnover	AE	Turnover / Total Assets

ROE = Net Income/ Shareholders Equity; DPR = Dividend/ Net Income

### 4. Empirical results

Table 2 shows the results of the company's performance level in general statistical measurements such as mean, standard deviation and variance respectively.

**Table 2:** Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation	Variance
SGR	164	-1.8623	2.5018	0.1070	0.4585	0.2102

Leverage Ratio	164	-3.8993	11.2967	1.8438	2.4507	6.0058
Current Liquidity	164	0.2062	17.0620	2.0978	2.1115	4.4583
Asset Efficiency	164	0.0013	4.8295	1.3310	0.8211	0.6741

In table 2 it has been shown that 164 (N) is the total observation of data using companies from real estate sector to represent data related to sustainable growth, financial leverage, liquidity, and asset efficiency.

The results of the sustainable growth rate (SGR) have shown that the minimum value at the negative level (-1.8623) indicates that these companies are likely to have a problem in business, bankruptcy or unable to repay debt. However, the maximum score of just 2.5018 shows the level of prosperity for those companies in year 2020. The results of the Leverage Ratio have shown that the minimum value at the negative level (-3.8993) indicates that shareholders make a lower profit compared to the overall profitability of the company. The maximum score of 11.2967 shows that those companies will depend more on its claims. The minimum result of the Current Liquidity Ratio (0.2062) indicates that for those companies' short-term payables are not covered by current assets, while the maximum of 17.0620 shows that these companies are protected from lack of liquidity, which could be caused by short-term debt repayment at the request of creditors.

Minimum level for Asset Efficiency is very low (0.0013), but the maximum level 4.8295 shows that these companies are using efficiently its assets to generate sales.

**Table 3:** Pearson Correlation

Variables	SGR	Leverage Ratio	Current Liquidity	Asset Efficiency
SGR	1	-0,235**	-0,074	0,220**
Leverage Ratio	-0,235**	1	-0,243**	0,087
Current Liquidity	-0,074	-0,243**	1	-0,134
Asset Efficiency	0,220**	0,087	-0,134	1

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

The Pearson correlation results in Table 3 shows that the results of SGR strengths of association with all the variables are small and is negatively correlated with the Financial leverage and Liquidity at 1% level of significant, while with the Asset Turnover is positively and directly correlated.

**Table 4:** Regression Results

Regression statistic	R Square	Adjusted R Square	F-statistic	Sig.
	0,125	0,109	7,642	0,000 <sup>b</sup>

a. *Dependent Variable: SGR*

b. *Predictors: (Constant), Asset Efficiency, Leverage Ratio, Current Liquidity*

Variable	Unstandardized Coefficients		Standardized Coeff.	t	Sig.
	B	Std. Error	Beta		

(Constant)	0.084	0.083		1.018	0.310
Leverage Ratio	-0.053	0.014	-0.282	-3.698	0.000
Current Liquidity	-0.024	0.017	-0.112	-1.456	0.147
Asset Efficiency	0.128	0.042	0.230	3.078	0.002

Table 4 shows that the relationship between Leverage Ratio and Asset Efficiency with Sustainable growth rate has a significant relationship at the 1% level of significant (as the p value < 0.01). However, Current Liquidity have insignificant relationship with Sustainable growth rate (as the p value > 0.01, 0.05 and 0.10).

Model equation for regression results stated as follow:

$$\text{SGR} = 0.084 - 0.053 * \text{Leverage} - 0.024 * \text{Current Liquidity} + 0.128 * \text{Asset Efficiency}$$

The determination coefficient (R Square) shows that only 12.5% of the variation of the dependent variable is explained by the variation of the three predictors in the analysis.

## 5. Conclusions

The purpose of the study is to examine the relationship between financial leverage, liquidity and asset efficiency with sustainable growth rate. The empirical results find that company's financial leverage has a significant and negative impact on sustainable growth rate because of higher finance costs, while the results of correlation between liquidity and sustainable growth rate shows negative, but not significant impact, which indicates that the higher the leverage ratio and current liquidity will increase, sustainable growth rate will decrease. The results of the last variable analyzed show a positive and significant correlation between asset efficiency and sustainable growth rate.

The conclusions of this paper open new research directions starting from the hypothesis that sustainability has the potential to influence the performance of a company. The results and findings of the study, even though they are significant, have their limitations, which consist in modelling of reduced number of variables, the existence of other factors that could influence the results, opens new research directions that can be extended to cover longer time periods, other econometric techniques and financial indicators of the companies or more macroeconomic factors in studying the company's performance.

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# CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE. EVIDENCE FROM AIRLINES INDUSTRY

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**Abstract:** *This paper aims to examine the impact of corporate governance mechanisms on firm's performance of the Airlines industry. The data was collected from the Refinitiv Eikon for a sample of 62 companies during the period 2019-2020. The SPSS statistical program was used to run the regression model to the selected sample. The results of the study are mixed. Board size and board meetings have a negative impact on companies' performance, both measured by ROA and ROE while CEO duality has a positive when is measured by ROA and positive when is measured by ROE. For these three characteristics was founded an insignificant impact. The board independence has a positive and significant association with ROA and a positive and insignificant impact with ROE. The results obtained may help the management companies to perform their corporate governance.*

**Keywords:** Corporate governance; firm's performance; airlines industry; COVID-19.

**JEL classification:** M41; G34.

## 1. Introduction

In the last past few years was widely debated the corporate governance and company's performance topics by the researchers. These topics used different metrics for corporate governance such as Board independence, Board size, Board gender diversity, CEO-chair duality and for companies' performance Return on Assets (ROA) or Return on Equity (ROE) as Lungu et al. (2020) highlighted in their study.

The results of this study are mixed. Board size and board meetings have a negative but insignificant impact on ROA and ROE while CEO duality have a negative impact on ROA while for ROE the impact is positively. Board independence is the corporate governance metric which have a significant positive association with ROA and positive but insignificant with ROE.

The reminder of this paper advance as follows: the second section present the most recent literature regarding of this topic, while the third section presents the research design and method, variables, and data sample. The fourth section is dedicated to the results and conclusion of the study are provided in the fifth section.

## 2. Literature review and hypotheses development

An important role was given to the head of the board. Duru et al. (2106), Tang (2017), and Wijethilake and Ekanayake (2019) in their studies founded that the CEO duality has a negative impact on firm's performance while Guillet et al. (2013) founded that the CEO duality helps to improve the firm's performance.

- *H1. CEO duality has a positive impact on company's performance*

The size of the board was debated in the literature. Cheng et al (2008) and Merendino and Melville (2019) founded that board size has a positive effect on firm performance when the number of members is smaller and the contrary when is largest. Badu and Appiah (2017) and Alqatan et. al (2019) also found a positive impact on companies' performances

- *H2. Board size has a positive impact on company's performance*

Idris and Ousama (2021) and Eluyela et al. (2018) founded that board meetings has a positive impact on firms' performance. The results of Hanh et al. (2018) show that the board meeting negatively affect the company performance.

- *H3. Board meetings has a positive impact on company's performance*

Moreover, the board independence was wildly analyzed by the researchers in his relationship with company's performance. Rashid (2018) and Shan (2019) founded that there is no positive impact on the company's performance while studies such Uribe-Bohorquez et al. (2020) founded the contrary.

- *H4. Board independence has a positive impact on company's performance*

### 3. Research design and methodology

This paper aims to examine the impact of corporate governance mechanisms on firm's performance of the Airlines industry during uncertain time. Both for corporate governance and firm's performance mechanisms data was collected Refinitiv Eikon for the Airlines companies. The period for this study is two years period represented the 2019 and 2020 years. The search initially generated information for 7.210 companies. After removing the companies for which was found no data the final sample consists in 62 companies from all over the world.

To run our regression model, we use the SPSS statistical program and the equation model used to analyze the influence of corporate governance mechanisms on company's performance is expressed as follows:

$$FP_{it} = \beta_1 BZ_{it} + \beta_2 BIND_{it} + \beta_3 BM_{it} + \beta_4 CEO_{it} + \beta_5 FZ_{it} + \varepsilon_{it}$$

In our study, the firm performance is represented by Return of Assets (ROA) and Return of Equity (ROE) which was downloaded from Refinitiv Eikon and calculated as a ratio of earnings before interest and taxes to total assets, respectively, profit after tax as percentage of total equity. The corporate governance metrics used were: BZ-Board size, measured as total number of board members; BIND-Board independence calculated such the number of independent directors on the board divided by the total number of directors on the board; BM-Board meeting expressed by the number of meetings held by boards every year and CEO-CEO Duality expressed as a dummy variable equals 1 when CEO doubles as board chair and 0 otherwise. We use two control variables measured by metrics. LV-Leverage which is a ratio between total debt and total assets and FZ-firm size calculated such a natural logarithm of total assets.

### 4. Results

In table 1 we performed the descriptive analysis for both dependent and independent variables included in our study. The mean value of our sample for ROA and ROE is -3.22% and -12.45%. the minimum size of the board for the companies from Airlines is 5 while the maximum is 22 with a mean of 10.51. Furthermore, the maximum no of

meetings per years are 53 with a minimum of 4 meeting and a mean of 13.36. The mean percentage of the independent members of the board is 60.39, which means that more than 60% of the members are independent with a minimum of 3.33 and a maximum of 100.00.

**Table 1: Descriptive Statistics of Variables**

	N	Min	Max	Mean	Std. Dev.	Var.	Skewness		Kurtosis	
							S	SE	S	SE
CEO	124	0	1	0.28	0.452	0.204	0.979	0.217	-1.058	0.431
BSIZE	124	5	22	10.51	2.763	7.634	1.491	0.217	3.956	0.431
BM	108	4	53	13.36	9.345	87.336	2.035	0.233	4.931	0.461
BIND	124	3.33	100.00	60.39	25.60	655.307	-0.214	0.217	-1.269	0.431
ROE	111	-334.3%	503.1%	-12.45%	85.95%	7387.727	1.321	0.229	15.109	0.455
ROA	108	-42.6%	10.0%	-3.22%	8.69%	75.437	-1.233	0.233	2.857	0.461
FZ	113	16.92	25.00	22.92	1.18	1.395	-0.954	0.227	4.427	0.451

Notes: S – Statistic; SE - Std. Error

**Table 2: The impact of ROA and ROE on Corporate Governance mechanisms**

	ROA		ROE	
	Coefficient	Sig.	Coefficient	Sig.
(Constant)	7.104	0.722	-489.876	0.024
CEO	-0.526	0.789	40.396	0.062
BSIZE	-0.211	0.479	-1.122	0.739
BM	-0.295	0.002	-2.051	0.055
BIND	0.008	0.811	0.247	0.473
FZ	-0.182	0.840	21.308	0.030
F statistic	2.323		2.768	
Durbin-Waston	1.03		1.731	
Adjusted R-square	0.072		0.91	
ANOVA Sig	0.05b		0.23 <sup>b</sup>	
N	86		89	

In table 2 we presented the results of the regression analyses for the period 2019-2020 to analyze the impact of corporate governance mechanisms on firm's performance. Firstly, the impact of CEO duality has an insignificant negative impact on ROA while on ROE we founded a positive insignificant impact. These results are mixed as the studies conducted by Wijethilake and Ekanayake (2019) or Merendino and Melville (2019). Secondly, the board size has a negative impact for both ROA and ROE at an insignificant level being contrary with the previous results of Khatib and Nour (2021) and Merendino and Melville (2019). Third, we found a negative impact but insignificant for the board meetings for both ROA and ROE these results being in contrary with the results of Idris and Ousama (2021) and in concordance with the study conducted by Hanh et al. (2018). Finally, we found a positive and significant impact for ROA analyzed by the independence of the board and a positive impact for ROE being contrary with the study of Rashid (2018).

## 5. Conclusion

The aim of this study is to analyze the impact of the board size, board meetings, board independence and CEO duality on the company's performance measured by ROA and ROE using the SPSS software and running a linear regression analysis.

The results are mixed. The results for the first hypothesis are supported by 50%, ROA

is negatively associated with CEO duality while with ROE is positively associated. The hypothesis 2 and 3 are rejected, finding a negative impact for both board size and board meetings for both ROA and ROE while the fourth hypothesis is accepted, and we find a positive and significant association between board independence and companies performance measured by ROA and a positive impact on ROE.

This study may play an important role for the shareholders of the companies or other related parties by helping them to see if they will invest in the airline's companies or not. Moreover, this study has some limitation. Firstly, we found few data for the airlines industry and secondly the numbers of characteristics included in this study are restricted to the board characteristics and to the industry. Future research may be extended to more corporate governance mechanisms and more firm's performance measurements.

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