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*SECTION ECONOMICS, BUSINESS ADMINISTRATION, TOURISM
AND STATISTICS*

**PROMOTION IN TOURISM: A BRIEF HISTORY AND
GUIDELINESS OF THE NEW COMMUNICATION PARADIGM**

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Abstract: *Promotion has been and it is considered by famous authors as the key to any successful business in tourism. This fact reveals the need for this activity in any tourism business, at any level. The literature associates the promotion activity with the marketing activity but the practice has shown that the promotion can take place in the absence of a marketing plan or a promotion strategy. Moreover, promotion in tourism is closely linked to human activities without being able to specify an exact moment in history when these activities began to take place. Thus, this paper aims to make a journey through history to mark the moment of the promotion as an individual activity, which is interfering with the marketing activity. At the same time, by reviewing the specialized literature, this article wants to make the transition to the new communication paradigm, identifying the guidelines and its implications at the level of the tourism enterprise. The article presents the results of a theoretical, qualitative research, creating the theoretical framework for the development of tourism promotion, from antiquity to the present based on the review of the literature. The conclusions of this research highlight the contrast between the first manifestations of the promotional activity, the characteristic elements of the old paradigm and the new communication paradigm.*

Keywords: emergence of promotion; tourism; the new communication paradigm; literature review

JEL Classification: M37; Z32

1. Introduction

Promotion is considered the key to any successful business in tourism (Witt, Moutinho, 1999). This statement emphasizes the strength and necessity of this activity in any tourism business. In 1972, Lasseigne defined promotion as the

totality of expressions and techniques used by a company to attract, convince customers and communicate value, being an element of the marketing mix that has its origins in business dynamics. Over time, the promotion activity receives new values. This requires the implementation of new techniques and becomes part of human communication. Although from a historical point of view, the writings do not mention the moment of the promotion of tourism, this paper aims to draw a parallel between the moment when the promotion appeared as an independent activity and the appearance of the tourist activity, thus outlining the general framework of this trial. Subsequently, it is desired to take a journey through history and make a brief review of the existing stages, orientations and influences, finally reaching the analysis of the new communication paradigm. This article is the result of a close review of the literature, which is the key research method. Regarding the objectives of the paper, they were set as follows: O1: Realization of a conceptual framework and identification of the moment when tourism promotion appeared, O2: Realization of a conceptual map of the evolution of tourism promotion from the old paragim to the new communication paradigm in tourism, O3: Identifying the values of the new communication paradigm and the way / techniques of implementation in the tourism sphere.

Therefore, the two major chapters will try to point out the elements taken as a benchmark in terms of objectives. As part of human communication, promotion is used with the intention of promoting both the products and services of a business but also the places and destinations, ideas or people. Promotion is a key element in differentiating the products / services of a company in fierce competition such as the tourism industry (Kotler et al., 2020).

2. A brief history of tourism promotion

2.1 The emergence of promotion

Promot the emergence of promotionion, respectively promotion in tourism is closely linked to human activities without being able to specify an exact moment in history when activities that fall into this sphere began to take place. From a theoretical point of view, we can link the appearance of this concept to the first written mentions. The online etymology dictionary (2021), states in the etymological analysis of the term "promotion" the moment of its appearance in the literature as the year 1925. Making a foray into the literature we see that in ancient Egypt, informative messages about the products offered by the merchants were carved in pieces of stone on the side of public roads. At the same time, the Rome of the 500's was the city-state of the messages painted on the walls, the purpose being to promote public games or local business (Sampson, 2021).

Subsequent periods mark important milestones in the development of promotion actions. The fifteenth century brought to the fore the use of billboards while the nineteenth century launched the use of another revolutionary promotional tool, namely the print media. The period of the First World War also has effects on this industry, but the turning point is the interwar period. During this period, promotional techniques intensify. Also in this period, the increase of the production of goods and the stimulation of various categories of services are favored (Tungate, 2013; Sampson, 2021). This industry experienced a dizzying

development at the end of the Second World War, when the field was perfected by studying the market and introducing various marketing techniques. In the second half of the twentieth century, all the above-mentioned activities are adapting to technological changes of a cultural and social nature.

Thus, marketing, together with all its components, is definitely required in the efficiency of activities and economic results. Promotion is treated theoretically as part of the "Marketing" discipline, and tourism promotion as part of the "Tourism Marketing" discipline, a discipline imposed around the 1960s in Spain and Switzerland.

2.2 The emergence of tourism

The emergence of tourism is also lost in the mists of time, without clear historical information on this issue and the possibility of anchoring the phenomenon at once and a concrete space. The period of antiquity also brings important notes in terms of tourism, marked by trips for religious and sports purposes in ancient Greece, respectively commercial, therapeutic or cultural trips (participation in public games) in ancient Rome (Zuelow, 2015). Other specialized works speak of the time when travel began to manifest itself as the year 1600, and the use of the concept "tourist" being recorded 200 years later, according to Oxford Dictionary. The evolution of tourism follows a course similar to the evolution of promotion. The end of the 19th century addresses the issue of the "new industry" in terms of the use of thermal waters and the first official documents appear in the field of the hotel industry. A few years later, well-known works are published in the field of tourism, research on this phenomenon, its definition and evaluation. The passing of the years amplifies travel and their role, tourism thus becomes an increasingly important pillar in economic activity and at the same time an increasingly complex field, with influences in related areas.

2.3 Tourism promotion

Thus, it can be concluded that, despite the lack of conceptualization of these activities as promotional activities, respectively tourism activities, the promotion of tourism business and related activities is a phenomenon that is associated with civilization and humanity, making its appearance since antiquity. . We are therefore talking about the promotion of "business" in tourism, as an activity carried out since the earliest times of human existence. Tourism and its promotion are activities that have emerged with humanity. With a complex course, the promotion of tourism business today becomes a defining tool for obtaining favorable financial results and more.

The complex course of promoting the tourism business has been shaped over time by many influential factors relevant to evolution. Baker (2006) in his paper, "Marketing- An Introductory Text", mentions the general influencing factors relevant to the evolution of the promotion activity, namely: the craft industry, the division of labor, the industrial revolution and the excess of stocks. Although the author names them influencing factors specific to the promotional activity, they are gradually foreshadowed, also influencing the trajectory of the tourist activity.

The craft industry has been an important sector in the development of tourism since ancient times. At the same time, in emerging countries, the craft industry registers significant revenues precisely due to the tourism industry (Kamala, Roostika, 2018), thus, the relationship between the two industries is one of complementarity.

Tourism business is a significant generator of jobs worldwide. Referring to a recent period (2020), we note the role that tourism has on the labor market. 1 in 11 existing jobs globally belonged to the travel and tourism sector according to the Global Economic Impact & Trends 2019 report published by the World Travel & Tourism Council. Therefore, the subject of the division of labor has been of particular importance in this industry, an importance that persists to this day. The way in which the division of labor influences the promotion activities but also the tourism ones is obvious. However, the process of division of labor in the field of tourism encompasses a number of problems: low-skilled jobs are temporary or part-time, training is limited and long-term career opportunities are relatively few (Firth, 2020).

Continuing the journey through history, we notice that the industrial revolution has left its mark on the tourism industry, what we call today business in the field of tourism and also on how to promote these businesses. The special progress that took place with the industrial revolution in the field of technology facilitated the development of tourism activities. The year 1769 represents an important moment for this industry, being the starting point of the tourist transport revolution. This has been associated with the efficient use of resources, infrastructure and continuous adaptation to the needs and preferences of tourism demand (Gierczak, 2011).

2.4 Orientations of the promotion activity

In this context, of the outline of the evolution process of promotion, Kotler (2000) presents the five orientations of marketing activity and implicitly promotion: production orientation, product orientation, sales orientation, marketing orientation - consumer orientation and marketing orientation societal- to society.

From a chronological point of view, the first type of orientation developed at the level of enterprises captures the concept of production (Kotler et al., 2019), which, at the level of the tourism industry, stood out around 1930-1950, with a low interest in which means promotion precisely because of market conditions.

If until the 1950s and 1960s, business guidelines focused on production and the product itself, once consumption growth stabilized, there was a need to improve sales efforts (Jamrozy, 2007). The need for promotional actions was felt. In the tourist market, the buyer had become increasingly important. It changes the "rules of the game" and imposes its own requirements before carrying out sales activities. There is a need for a preliminary study of the market and thus the marketing orientation is born (Morrison, 2010). This evolution can be saw in the Figure 1:

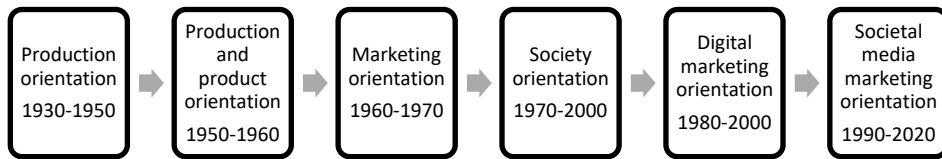


Figure 1: Stages in the evolution of promotion

Source: Kotler et al. (2019), Jamrozy (2007), Morrison (2010)

The adoption of the orientation towards the social marketing, represented for the sphere of tourism a real field of interest. Numerous studies conducted over time have investigated how to implement corporate marketing orientation in tourism companies and their effects, the importance of social responsibility and the interaction of ecological and economic responsibility. While Bright (2000) questioned the interest in social welfare expressed through the prism of social marketing, Dinan and Sargeant (2000) outline the meaning of "sustainable" tourism by exposing the role of social marketing in changing the behavior of tourists.

Although the tourism and hospitality industry has gone through the whole approach of the aforementioned guidelines, Morrison (2010) argues that this industry has always been behind other sectors by 10 or even 20 years. Starting from this, Morrison (2010) complements Kotler, including a new orientation: online marketing. Morrison's (2010) work is complemented by Saravanakumar et al. (2017), which considered it essential to mark a new era, namely Social media marketing and the interweaving of several trends such as Big Data, content strategy, customer focus. At the same time, Morrison (2010) is the one who traces the ideologies of the new communication paradigm, a paradigm that makes the transition to new techniques and methods, taking advantage of the gift of the 21st century, namely the Internet.

3. The new communication paradigm

The 21st century has been marked by the widespread development of the Internet and especially by the emergence of social networks. They have significantly shaped the way communications develop and have influenced consumer behavior both in terms of the awareness process and the opinions, attitudes, communication and subsequent evaluation of the acquisition process. In this context, the new communication paradigm is born, integrating social networks within the promotional mix.

Social networks, regardless of their form of materialization and inclusion (online forums, blogs, company-sponsored chat rooms, emails or websites) have amplified the impact of consumer-to-consumer communications on the market, content, timing and the frequency of their conversations outside the realm of the

traditional paradigm. Thus, many managers are reluctant to explore the role of social networks in the company's promotion efforts.

If in the old paradigm integrated marketing communications were considered to have a single meaning, the control over the information being held exclusively by the organization, the new paradigm brings to the fore the hybrid character of social networks as an element of the promotional mix. This hybrid character strongly contrasts the hegemony that the organization's managers exercised over all the information distributed, giving the consumer a power that has not been previously experienced on the market.

The hybrid nature of social networks is due to a set of features. In support of this, Managold and Faulds (2009) mention the role of social networks as an intermediary, a means of communication both between the company and the client and, most importantly, between clients, being an extension of traditional communication. A successful strategy of integrated marketing communications involves coordinating the information transmitted to the market through the promotional mix so that it reflects the values of the organization.

This role is also transposed to social networks, companies using this tool in order to communicate with customers. The second role of social networks is unique and consists in communicating between customers. If until now live communication between customers was given more importance due to the impact it had on promotion, in the context of the current paradigm the situation is accentuated exponentially. Gillin (2007) points this out, noting that if in traditional communications, the message of a dissatisfied customer reaches ten people in the age of social media, he has all the tools necessary for the message to reach millions.

At the same time, this character of social networks, mentioned above, also derives from mixed technology and media origins that allow instant communication, in real time, using various media formats, both audio and video and numerous platforms. Moreover, social networks can be considered a hybrid element of the promotional mix because they combine features of traditional tools with an amplified form of live information transmission between customers. In this context, the client enjoys that capacity that he did not know before and that limits the involvement of the organization.

If the traditional paradigm was the frame of reference for the development of integrated marketing communication strategies in the post-World War II period (Muniz, Schau, 2007), the 21st century highlights the contrasts determined by the new paradigm. Trends such as moving consumers away from traditional sources of advertising (Rashtchy et al, 2007), turning the Internet into a media vehicle for sponsored communications (Rashtchy et al, 2007), using it with an information generator based on purchasing decisions and providing them with increasing trust from consumers (Lempert, 2006, Vollmer, Precourt, 2008) have led to a change in important aspects of managers' attitudes and attitudes towards the formulation and implementation of communication strategies.

Among these changes, it is important for managers to take into account and accept that much of the information provided to potential customers and promotional activity will be made by the consumer through forums that directly influence consumer behavior, from the purchase decision to in the purchase

process. Figure 2 present the new communication paradigm and the relationship between parts of the communication.

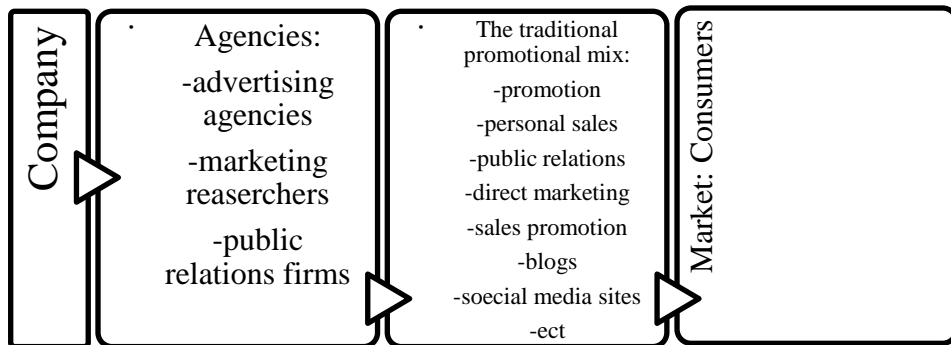


Figure 2: The new communication paradigm

Source: Mangold, Faulds, (2009)

3.1 Techniques and methods used in the new communication paradigm

Mangold and Faulds (2009) subscribe to the limitation of direct influence that can be exerted by the organization but delimit a number of popular models in the literature through which consumer discussions on social media can be modeled and indirectly influenced.

In this suite of techniques and methods recommended in modeling discussions are mentioned:

- providing platforms (communities that will focus on common interests and values to bring together as many customers and potential customers as possible), such an example is represented by the community / group "Recommended holidays - tourism" available on the network social networking Facebook and managed by the travel company Alma Trip), this activity should not be limited to social networks but may also involve sponsoring meetings and other events that provide the ideal framework for experimenting with products / services;
- the use of blogs and other tools for customer involvement (a good example of this can be illustrated by providing feedback, either in the form of criticism, praise or suggestions, through them, customer involvement being improved, the Hotel Opal located in Jupiter Cap Aurora offers its customers the opportunity to provide such feedback, through a survey section in which readers answer various questions or address them to site administrators);
- concomitant use of traditional and digital promotional tools (this intertwines classic promotion techniques with the use of social networks, consumers being determined to interact as much as possible with the public, a good example in this regard can be the contests that can be used for the involvement of tourists, the company Airfrance launched in March 2017 a contest with the prize of a

VIP stay at Disneyland Paris, to win the prize the customer had to fill out the registration form and make a creative wish for the 25th anniversary of Disneyland Paris, the Simbotour travel agency, organized a competition in 2020, offering the opportunity to customers who participated in the tourism fair and crossed the threshold of their stand, to win a voucher worth 100 euros for the purchase of subsequent tourist services, the extraction is done live on the Facebook page of the organization); providing information (consumers tend to talk more about the companies and products they know best, so many organizations create special sections where they provide information about products / services or other topics of interest, Green Village Resort in the Danube Delta provides customers both a "Useful info" section and a "Do you need help?" section of the chat type);

- outrageous behavior, making jokes to customers can lead to favorable reactions to the company (such an example can be found in the food industry, Burger King announcing to its customers that they have released the best-selling product; customer feedback was videotaped and subsequently, they went viral);
- offering exclusivity (consumers want to feel special, which can be achieved by offering products, information and special offers exclusively to a set of consumers, for example, members of the Etura group, tourism group, can benefit from different percentages of discounts for tourist packages depending on the nature of the status: silver (2%), gold (3%), platinum (4%));
- supporting important causes for consumers highlights the importance of emotional connection of the client (in this sense, organizations can capitalize on these emotional connections, supporting social, medical, environmental issues, education, etc., Mandachi Hotel in Suceava is an example in supporting important causes for consumers, during the military conflicts between Ukraine and Russia, it provided shelter for over 200 refugees and created special spaces for their animals);
- the use of stories (stories are memorable, they are easily transmitted live and stories also connect the customer emotionally; in the tourism industry historical perspectives, motivation, consumer involvement and telling an experience influence the potential tourist, Marmorosch Hotel in Bucharest uses tabs from history, just to attract the attention of potential tourists, thus, the hotel website is a whole story of the hotel, located in the former building of the most influential bank in Romania at the end of the 19th century, recommended as the ideal place to relive history);

The adoption of the new communication paradigm recognizes the ubiquitous nature of the information transformed this time into a virtual space. These new forms of communication, while limiting organizations, also give them a better understanding and the opportunity to create the optimal framework for incorporating their own strategies. If integrated marketing communications have traditionally been considered one-way, change is driven by a hybrid tool that paves the way for new communication, reorganizing the balance of control, and developing new discussion-shaping capabilities.

4. Conclusions

Both in the context of the promotion activity and in that of tourism, the appearance of concepts is lost in the mists of time without there being clear moments of their placement in time and space from a historical point of view. Thus, the set objectives were achieved. Regarding the first objective O1: Realization of a conceptual framework and identification of the moment when the promotion of tourism appeared, it was fulfilled, it was achieved. Regarding the promotion of tourism business, it is also a phenomenon that has appeared since antiquity, being activities that appeared with humanity and later following a complex path. This complex path has been paved over time with numerous influencing factors that played a key role in both the promotion and tourism activity: the craft industry, the division of labor, the industrial revolution and the excess of stocks. Also, the orientations of the marketing activity and implicitly the promotion respectively: the orientation towards production, product, sales and marketing and social marketing have left their mark on the industries and more than that on the way of interaction and promotion of the tourist activity. Also, the other two objectives were achieved: O2: Realization of a conceptual map of the evolution of tourism promotion from the old paradigm to the new communication paradigm in tourism, O3: Identifying the values of the new communication paradigm and the way / techniques of implementation in the tourism sphere. The tourism and hospitality industry requires the completion of marketing guidelines, including new guidelines such as: online marketing and social media marketing. Thus, the scale created by social media marketing gives rise to the new communication paradigm. The contrast between the two paradigms, also marked from a historical point of view, is illustrated by a series of trends such as moving the consumer away from traditional advertising sources, transforming the Internet into a media vehicle, using it as an information generator and providing an increasing interest from consumers. The direct influence of organizations and managers is limited, however, there are a number of techniques and methods that can shape customer discussions, including: providing platforms, using blogs and other tools to engage customers, and the simultaneous use of techniques. traditional and modern, providing information, outrageous behavior, offering exclusivity, supporting important causes for consumers, using stories. The adoption of this new paradigm recognizes the ubiquitous nature of information in the virtual space and these new forms of communication, although they limit the organization, also offer a better understanding of them and the incorporation of their own strategies. This paper is the basis for future research that will focus on analyzing and deepening the way in which the new paradigm requires the use of its own tools in tourism, conducting quantitative and qualitative research to analyze how the techniques of the new paradigm are implemented. at the level of tourism organizations. Thus, for the following works we aim to collect and analyze quantitative information regarding the promotion techniques used by the accommodation units included in the category of hotels in western Romania, the tools used by them and their efficiency from the perspective of hoteliers and marketing employees. It is also desired to implement a research among consumers that forms a representative sample.

Based on these we will identify the techniques considered by consumers as the most useful and thus we will make a correlation between the two studies.

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SURVEY OF THE TOURIST ATTRACTION OF THE CITY OF HAJDÚSZOBOSZLÓ

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Abstract: *The research presents the tourist attraction of the city of Hajdúszoboszló and the development of tourism within the city. We also made a comparison with the national tourist data in the case of Hajdúszoboszló. The study of the topic is topical, as tourism has undergone tremendous changes not only nationally but also globally in the last two years as a result of the global pandemic epidemic. At the end of the research, the pandemic situation had weakened, but its direct and indirect effects were still felt to a small extent in tourism. That is why we have reviewed the overall development of tourism in the world and in Europe in recent times. We also reviewed the essential features of domestic tourism. We have also summarized in detail the measures aimed at alleviating the sector's downturns and facilitating the boom in tourism. For these reasons, we examined the factors influencing the holiday in Hajdúszoboszló among the guests (holiday) staying in the city in the framework of our own questionnaire survey. How the guests planned to spend their vacation, which city attractions and locations are the biggest attraction for them in Hajdúszoboszló.*

The aggregate results of the survey are compared with a similar recent survey by the Tourinform office. The Tourinform survey was more widely conducted (due to financial factors). The survey from the Tourinfo office is representative. The conclusions drawn from the results of the two studies adequately show the development of tourism in the city.

Keywords: *tourism, survey, Hajdúszoboszló, matrix*

JEL Classification: Z32, L83

1. Generally

Tourism is a global driving force for national economies, providing a significant source of revenue for both people and the country. According to the definition of tourism, people make a change of location for different purposes than their usual way of life (regardless of its duration or travel purposes). The definition includes the fact that the organizational conditions created to meet the necessary needs are fulfilled by different (specialized) service providers (Michalkó, 2012).

This sector allows the population to relax in a different environment than usual. In addition, the industry provides other entertainment and relaxation opportunities for people that they cannot access under other platforms. Of course, in 2021 and

2022, this sector was hugely affected worldwide by the pandemic epidemic (Orava-Várhelyi, 2020).

At the end of 2019, a pandemic broke out in the Chinese city of Wuhan. It quickly grew to be worldwide. The epidemic has brought many changes to people's lives that they have not encountered before (for example: curfew, mandatory mask wearing, adherence to various shopping time limits, restrictions on leaving and traveling, etc.). Due to restrictions, the tourism and other service sectors have been completely paralyzed. To offset the restrictions, until the epidemic eased, governments sought to take various economic protection measures. With the measures, the government wanted to ease the lost wages of workers and entrepreneurs in the sector.

In order to alleviate and prevent the economic difficulties caused by the coronavirus epidemic, the Hungarian government has introduced several measures to alleviate the burden on economic operators. Between March and June 2020, the government granted a contribution rebate to actors in the most affected sectors (such as tourism, entertainment, various sports services, and the hospitality industry). The contribution rebate meant that all employees present in all affected sectors had to pay only the health insurance contribution (the amount was HUF 7,710). The government waived all other mandatory contributions during this period (Vargha et al., 2021).

The contribution rebate was later extended and between November 2020 and April 2021, employees were also exempted from paying the above-mentioned public charges. At the same time, from July 1, 2020, the rate of social contribution tax was reduced from 17 and a half percent to 15.5 percent. For March and June 2020, the government also provided incentives for small businesses to pay the tax. Employees using the KATA tax form were allowed to pay their tax arrears accumulated before March 1, 2020, after the end of the emergency, in equal monthly installments of 10 months after the end of the emergency. All employees using the KATA tax form (small business) who were in this method of payment in February 2021 were not required to pay itemized taxes for March and April of the current year (I2).

Between 1 March 2020 and 30 June 2020, employers in the sector did not have to pay a tourism development contribution. This benefit is provided by the government until the end of the emergency. They were also exempted from paying the tourist tax between 2 April 2020 and 31 December 2020 (I2).

1.1. Introduction - Development of tourism in the world

Tourism is currently a sector recovering from a difficult period that, according to the United Nations World Tourism Organization (known as UNWTO), is beyond the hardest and worst revenue-producing years in its history. According to statistics, international travel due to the coronavirus epidemic was approximately 75 percent lower in 2020 than in the previous year (I1). This number represents a travel number of approximately one billion people. Previous crises have never seen such a sharp decline (for example, in the year of the economic crisis (2009), only a 4.3 per cent decline was realized). The biggest loss due to the Covid epidemic was in Asia (hence the epidemic). Asia has seen a decline of about 84% in the number of trips, which is roughly 300 million passengers. For European travel, this decrease is around 71% (approximately 500 million passengers in the area) (I1).

Despite these effects, tourism is still a constantly evolving sector. Tourism accounts for about one-fifth of world GDP, providing livelihoods and jobs for about 250 million people. Trendy changes can also be observed in tourism. The importance of European tourism is still huge, but the trend is steadily declining. At the same time, there is a growing interest in tourism opportunities in Asia and the Ocean. Looking at the various tourist routes worldwide, we find that domestic travel accounts for about 90% of all travel. Travel abroad accounted for 10 per cent.

Tourism has been a driving force in various economic developments for decades. Of course, it played a leading role in the areas where the settlement has some natural endowments, there are local sights, there are various notable events in the settlement, there are festivals in the city, and so on. The special urban features make these cities attractive. Tourists like to travel to a named city, tourists are willing to spend their holidays here and buy services in the city (for the purpose of spending money). Years ago, tourism was negatively affected by natural disasters or war or disorder in the area. From 2021, the coronavirus epidemic will also have a negative effect on tourism (12).

Examining the data of the world, it can be stated that there is a worldwide expansion in tourism in terms of the willingness to travel today. As their incomes increase, tourists will be able to enjoy better and more affordable services in terms of value for money. Distant destinations will also be easily accessible to tourists. Nowadays, more and more travel services are being introduced (especially in the field of air travel), making it cheaper to get anywhere in the world. Previously, visiting another continent was only available at high prices. Today, these opportunities have expanded and tourists have less and less access to travel (Michalkó, 2022).

1.2. Introduction - Tourism in Europe

Europe is currently the world's leading tourist destination. Europe has a significant role to play in ensuring that the economic growth of countries with attractive tourist destinations (but less developed ones) does not lag far behind other countries. Europe has the potential to create many job-creating investments. Europe provides a livelihood for people in many areas where people would not otherwise be able to find a job. This does not reduce the burden on the state because no assistance is needed. The country generates tax revenue instead of aid (Figure 1). The development of tourism is unbroken, it has not lost its momentum even during the major economic crises (13).

In 2016, one in ten businesses (non-financial businesses) was involved in tourism in Europe. Nearly two and a half million businesses in tourism have provided employment to approximately 14 million people in recent years (14).

According to the United Nations Tourism Agency in 2015, Europe was the main destination for international travel. Europe accounted for 51.2% of global travel (607.2 million passengers). The development rate of European tourism (+ 4.6%) was in line with the world average. Central and Eastern Europe showed an increase of 5.1% compared to previous years. In Northern Europe the growth rate was 6.5%, and in Southern Europe the growth rate was 4.8% (14).

Examining international tourism revenues, Europe accounts for 35.7 percent of world tourism (about \$ 451 billion). Western Europe has been the most popular

travel destination for decades, with 42 percent of tourists heading to the continent. This represented about 190 million passengers (I9). All forms of European tourism aim to develop the tourism sector (sustainability of its services) and, of course, to ensure quality. To this end, many innovations will be implemented that will help these added values improve the competitiveness of the sector. Efforts are now not only aimed at serving general needs, but also at market gaps such as ecotourism, meeting the needs of older generations or making a tourist destination accessible to the widest possible audience (I9) (Table 1).

Country / Region	Contribution of the travel and tourism sector to GDP (%)
Mexico	15.5%
Spain	14.3%
Italy	13.0%
Turkey	11.3%
China	11.3%
Australia	10.8%
Saudi Arabia	9.5%
Germany	9.1%
United Kingdom	9.0%
United States	8.6%

Table 1: The contribution of tourism to the GDP of each country
Source: Portfólió, 2020, I9

Continuous improvements take into account not only quality aspects, but also the implementation of other services that reduce the degree of seasonality. These services allow you to maintain continuous operation. The development of a given area enables not only the tourism sector, but also the development of other industrial and service sectors related to the area (the agriculture of the area also plays a significant role in supplying the people visiting the given place, it also serves as a base for local gastronomic attractions, which are also a tourist attraction). The development of tourism also parallels the activity of the construction industry. The availability of individual sites, the provision of accommodation and the architectural needs of the provision of various services provide employment opportunities for workers in this sector (I9).

1.3. Introduction - Development of tourism in Hungary

Tourism contributes to Hungary's economic performance in a large volume. Hungary provides employment opportunities for many people. According to statistics, the share of tourism in the economy is 6.8% of GDP. Taking into account the results of the added and associated sectors directly related to tourism, this value is 10.7% of GDP. The number of people working in the tourism sectors is 430 thousand. 10.0% of the vacancies are provided directly by tourism in Hungary. Taking into account both direct and indirect effects, the number of posts filled is as high as 13.2% (I5).

The continuous development of the sector is evidenced by the steady upward trend in the sector's performance since 2010. 2018 was the best marketing year. The trend was broken by the coronavirus epidemic. After the epidemic, the industry will hopefully return to its original level. We still have to wait for the recovery. According to official figures, about 12.6 million people used the services provided by accommodation in 2018. This figure represents an increase of more than 58% compared to 2010. Its distribution shows an increase (57% increase in the number of domestic guests, 59% increase in the number of foreign guests). This increase resulted in a HUF 301 billion increase in sales (more than 85 percent in hotels) (I5). The hospitality sector generated HUF 121 billion in revenue. Related tourism services generated HUF 88.5 billion. The 6.7 million domestic guests spent 130% more on accommodation than in previous years. For foreign guests, the rate is 133%. Numerically, this means 5.9 million people (I5).

The number of domestic accommodation establishments in the summer of 2018 was 3,477 (98,577 rooms), with 344,689 beds. Room capacity utilization averaged 51.4%. Hotel occupancy was 61.3% (I5).

In order to achieve continuous development, the government established the Hungarian Tourism Agency in 2016. The aim of the operation of the Hungarian Tourism Agency is to make more efficient use of the tourism opportunities provided by the country and to promote the development of its infrastructure and the quality of services. In this way, the Hungarian Tourism Agency intends to improve the competitiveness of the sector and indirectly contribute to the growth of the country's GDP (I6).

Tasks:

- coordination of tourism developments, taking into account related laws
- building and expanding marketing

communication activity

- developing, building and maintaining an image
- professional management

tourism innovation

- preparation of situation analyzes
- Elaboration and coordination of Hungary's participation in world exhibitions
- research, analysis of incoming data
- completion of training tasks (I6)

2. Research, results

2.1 Presentation of the test method

To explore the research topic, we compared two questionnaire surveys. We wanted to explore the awareness and acceptance of Hajdúszoboszló by conducting two questionnaire surveys. The first questionnaire was prepared by us and the second by the TOURINFORM Office. In our research material, we compare these two surveys. The aim of the two surveys is to assess the tourism opportunities and activities of the city of Hajdúszoboszló. What is the opinion of the tourists coming from Hajdúszoboszló and what services do the tourists visiting here

use? about what they think of the city and how it would all turn out if we ceased operations.

3. RESULTS

3.1 SWOT analysis of Hajdúszoboszló

Based on the SWOT analysis, it can be stated that the strengths and opportunities of Hajdúszoboszló lie best in tourism and services based on thermal water. The city has a colorful historical past and traditions that should be emphasized. Among the weaknesses and dangers, we would like to highlight mainly the seasonal and weather-dependent services, and the fact that the events in the town are mostly limited to spa services and some local events. In our opinion, a more diverse range of programs may involve the creation of new opportunities.

Strengths: nationally and internationally known spa town, the city has high quality thermal and medicinal water, the capacity of the spa and spa is very high, the range of wellness hotels, popular festivals, events, modernized sports events, cycling network, complex medical tourism offer, regional the proximity of the airport (Debrecen) and the city can provide little space for the highly educated workforce.

Weaknesses: lack of parking facilities, one-stop-shop (tourism), disproportionate distribution of supply within the city, seasonal and weather-dependent services, predominance of small businesses, significant emigration of qualified, qualified young people, and little natural and architectural attractions in the settlement.

Opportunities: expansion of the tertiary sector (services), increase of the demand for paid health tourism, strengthening of domestic and foreign competition, development of quality spas, reduction of inconsistent development plans, developments based on territorial conditions and existing values, and creation of a stable clientele.

Threats: the weaker performance of the dominant economic sector (tourism), the discrepancy between the range of supply and the needs of the target group, the stratification of the current target group (aging, declining foreign visitors) and the declining population.

3.2 Comparison of the questionnaire and the official survey

Using the method of the questionnaire survey, we managed to fill in our own questionnaire with the help of the guests (and the population) visiting the city, as well as those interested, in which we surveyed the habits of the guests arriving in Hajdúszoboszló. The results of the survey were compared with the results of a study conducted by the Tourinform Office. By analyzing the differences between the two, we would like to show the value and possible reasons for the answers to the questionnaires. The number of people interviewed approached 1,000. The survey of the Tourinform Office was prepared before the tourist season in order to give Hajdúszoboszló a comprehensive picture of the tourist opinions about the city, the needs of the tourists and the habits that can better serve the tourists. Another purpose of the survey was to provide information and feedback on the effectiveness of ads. With ads, the city's main goal is to attract even more visitors to the city. Depending on the display interface and the length of time the ads are

published, the costs vary widely. Advertising on a flyer costs a few thousand to ten thousand forints, a television advertisement costs many millions of forints. Another important result of our study is that the enterprises operating in the city, the enterprises dealing with tourism and hospitality get an insight into the quality and popularity of the services they provide. Based on the opinions of the tourists in the questionnaire, we get information about the direction of the services needed at the given company.

3.3 Comparing the results of my own survey with that of a tourist office

Based on the gender analysis, the percentage differences are not high (9.4% for women and 12.4% for men). In both surveys, women are included in more than two-thirds (one-third of men). The willingness to fill shifts in the direction of female participants. The willingness of men to participate in this direction is higher only in the topics that concern them. In terms of ages, a comparison of the results is shown in Table 2, where the differences are also illustrated in percentages.

Age group	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Under 18 years	5.0%	0.1%	4.9%
Between 18-25 years	16.0%	1.4%	14.6%
Between 26-35 years	23.0%	4.6%	18.4%
Between 36-45 years	21.0%	14.3%	6.7%
46-55 years	11.0%	23.2%	- 12.2%
Between 56-65 years	19.0%	26.7%	- 7.7%
Over 65 years	5.0%	29.7%	- 24.6%

Table 2: Comparison of age from the results of the two surveys
Source: own editing

These differences are, of course, only a benchmark. The number of respondents and the scope of distribution of the questionnaires are different. In our application form, there were significantly more juveniles (5%) than in the survey of the Tourinform Office (only 0.1% at the Tourinform Office). In general, the higher the age, the more people are within categories in both surveys. In our own study, the younger age group was largely involved. The difference is also small between the ages of 36-45 and 56-65 (6.7% and 7.7%, respectively). In our own study, a higher proportion of those between the ages of 18 and 25 (14.6%) and those between the ages of 25 and 35 had a difference of 18.4%.

Another striking difference is that the proportion of people over the age of 65 among the participants in the Tourinform survey is much higher (24.6%) than in our study. In our view, this discrepancy is due to the fact that the Tourinform survey was much more widespread and the higher number of respondents was obviously more than 65 years old. In general, it can be stated that our survey was completed among the younger age group, while the questionnaire compiled by the office was completed by a larger number of older people.

The differences between the examinations of educational attainment are illustrated in Table 3. Based on the results of the questionnaire, we get an answer to the level of education of the respondents.

Type of education	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Elementary School	7%	3.7%	3.3%
High school / graduation	35%	46.5%	- 11.5%
Skilled worker / vocational school	25%	27.1%	- 2.1%
Other	5%	1%	4%
College / University	28%	21.8%	6.2%

Table 3: Comparison of educational attainment

Source: own editing

Among those with educational attainment, those with primary education, vocational education and other education had the lowest variation rates. Those with tertiary education are only 6.2% apart between the two surveys. High school and high school graduates show a difference of 11.5% in favor of the Tourinform Office (this is due to a higher turnout).

In our own survey, the majority were those with intellectual occupations. According to a survey by the Tourinform Office, retirees were in the majority (Table 4).

Position	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Entrepreneur	8.46%	4.5%	3.96%
Senior position	6.15%	2.9%	3.25%
Intellectual employed	40.7%	15.8%	24.9%
Manual worker	12.3%	24.5%	- 12.2%
Pensioner	16.15%	43.6%	- 27.45%
Pupil / student	9.23%	1%	8.23%
On „GYED” / „GYES”	1.53%	2%	- 0.47%
Job seeker	3.84%	2.3%	1.54%
Other	1.53%	3.4%	- 1.87%

Table 4: Distribution of occupations within the two surveys

Source: own editing

The difference between the retirees is the highest (27.45%) in favor of the Tourinform Office. The higher rate is due to the higher proportion of retirees surveyed by the Tourinform Office. The proportion of the employed is 24.9% in our own survey, and the proportion of manual workers is over 10%. For all other categories, the value of deviations was lower than this.

The share was 3.96% for entrepreneurs, 3.25% for management positions, 1.54% for jobseekers and 1.8% for other occupations. The smallest difference was for the “GYED” and “GYES” headcount (0.41%).

The two surveys showed how much respondents are willing to spend on travel on an annual basis. The two questionnaires gave slightly but different intervals for the

amounts (but the differences are not significant). Age and the resulting employment and earnings conditions have obviously led to a different propensity to travel. The most obvious difference can be found in the category below HUF 50,000, which was a uniform response option for both questionnaires. There was a 54.6% discrepancy in the results of our survey. This discrepancy determined how often people travel on holiday every year and what accommodation the tourist books (what program option they prefer). In the other value categories, the intervals differed in bands of HUF 50,000. The results show a slight overlap in our survey compared to the Tourinform office. Due to the overlap, the comparison of responses is only relative (interpretation is only possible in order of magnitude). It is clear that the Tourinform survey shows a higher percentage of the amounts spent on higher travel in all cases. The higher number of tourists interviewed by the Tourinform Office can explain the development of the results. In the case of income, the two surveys contain different value categories. The Tourinform Office questionnaire used three categories (below average: 28.7%; average: 68.0%; above average: 3.3%). In our opinion, these have resulted in quite subjective responses, as in neither case is there a limit to the range within which each category ranges.

We also indicated a value amount in our own questionnaire. This made it easier for tourists to interpret our questionnaire (the results obtained can also be better interpreted). In general, the proportion of fillers rises exponentially to the highest category, where again a lower value can be observed.

The two surveys also examined respondents' willingness to travel (both abroad and domestically). The frequency of travel propensity is shown in Table 5.

Frequency	My survey		Tourinform Office Survey		Deviation (Compared to my own survey)	
	Inland	Abroad	Inland	Abroad	Inland	Abroad
Several times a year	6.15%	5.92%	57.2%	4.5%	- 51.05%	1.42%
Once a year	44.61%	41.69%	33.7%	19.1%	10.91%	22.59%
Every 2 to 3 years	29.23%	32.3%	5.4%	13.6%	23.83%	18.7%
Less often	20.1%	20.09%	3.7%	62.8%	16.3%	-42.71%

Table 5: Comparison of willingness to travel

Source: own editing

According to our own survey, almost half of the respondents take part in domestic travel once a year, and travel to Hungary several times a year is not significant. According to our own survey, almost half of the respondents take part in a trip abroad once a year, and traveling abroad several times a year is not significant here either. In the case of both domestic and foreign travel, 30% of respondents indicated 2-3 occasions per year. According to a survey by the Tourinform Office, nearly half of those surveyed travel to the country several times a year. According to a survey by the Tourinform Office, the vast majority of respondents rarely travel abroad. In our opinion, this difference may be due to the fact that the younger age group participated in our questionnaires in a higher proportion than the older age group. Students' work or income conditions do not allow them to travel multiple

times a year. The salary of older workers already allows for better participation in excursions. In the two surveys, foreign travel now shows a difference of only 1.42 percent. Of course, the presence of a coronavirus epidemic should also be taken into account when evaluating the two surveys (the various restrictions imposed by the corona virus should also be taken into account). The different results can also be explained by different age and income conditions. Younger respondents are more likely to be able to visit different destinations every two to three years. Only a small proportion of those surveyed by Tourinform prefer this travel frequency. This is also supported by the results of the less common category for domestic travel, where we find 16.3% more markings in favor of our survey. For trips abroad, the difference is 42.72% in favor of the Tourinform Office.

Destination of travel	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Healing, treatment	2.60%	17.9%	-15.30%
Wellness, rest	17.30%	37.9%	-20.6%
Cultural programs	10.60%	8.6%	2.00%
Gastronomy	19.90%	6.5%	13.40%
Official way	1.30%	0.4%	0.90%
Festivals	27.00%	2.7%	24.60%
Relative. friend visit	7.90%	7.1%	0.80%
Active recreation	7,72%	18.2%	-10.48%
Other	5.38%	0.7%	4.68%

Table 6: Comparison of travel destinations

Source: own editing

The various programs preferred by the younger age group are, for example, festivals (27.0%), gastronomy (19.9%), wellness (17.3%) and cultural programs (10.6%) (Table 6). Visiting relatives and friends (7.9%) and active recreation (7.72%) play a smaller role. The various programs preferred by the older age group include wellness (37.9%), active recreation (18.2%), and medical treatment (17.9%). Cultural programs (8.6%), kinship visits (7.1%) and gastronomy (6.5%) play a smaller role. Based on both surveys, the official route and other categories play a minor role.

In the following, we compare the analysis of the popularity of advertisements about Hajdúszoboszló. The results are shown in Table 7.

How to advertise	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
TV advertisement	17.7%	19.3%	-1,6%
Facebook ad	29.7%	45.5%	-15,8%
Other online advertising	40.1%	17%	23,2%
Billboard	3.5%	5.7%	-2,2%
Printed flyer	6%	2.7%	2,8%
Newspaper ad	2.9%	6.9%	-4.0%
None of them	0.6%	3%	-2,4%

Table 7: The popularity of Hajdúszoboszló through advertisements

Source: own editing

According to our own survey, the proportion of other online ads (free) is the highest (marketplace free advertising, online advertising space ads, etc.). In contrast, according to a survey by the Tourinform Office, Facebook's paid ads reached the

highest share. In the case of both questionnaires, TV advertising and newspaper advertising play a medium role. The billboard and the printed flyer play a minor role. The results can be explained by the fact that, due to the epidemic, Internet-based advertising has taken precedence over the print media. The question of whether the respondents have already visited Hajdúszoboszló is presented in Table 8.

Frequency of visits	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Yes, several times	68%	68.5%	0.5%
Yes, once	9%	16.8%	7.8%
Yes, in transit	20%	4.6%	15.4%
Not yet	3%	10.1%	6.9%

Table 8: Frequency of visiting Hajdúszoboszló within the surveys

Source: own editing

Based on the results, it can be stated that more than two thirds of the respondents have visited Hajdúszoboszló several times. The difference between the two surveys is 0.5% here. The largest difference was in the case of the transit response, as the difference between the two questionnaires was 15.4 percentage points. Persons arriving in Hajdúszoboszló once showed a 7.8% difference based on the two questionnaires.

Among those who filled in the questionnaire, we surveyed what kind of accommodation tourists prefer to visit Hajdúszoboszló. Those who were not in Hajdúszoboszló, what kind of accommodation they would choose. The results are shown in Table 9.

Accommodation	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Hotel	50%	51.6%	1.6%
Pension	20%	15.5%	4.5%
Camping	10%	1.5%	8.5%
Other	6%	2.2%	3.8%
Private accommodation	14%	29.2%	15.2%

Table 9: Comparison of preferred accommodations

Source: own editing

The smallest difference between the responses of the two questionnaires was for hotels (there was a difference of 1.6% between the results of the two surveys). In second place are the other categories with a difference of 3.8%. The third place is taken by boarding houses with a difference of 4.5%. The highest difference can be realized for campsites and private accommodation, where the difference is 8.5% and 15.2%, respectively. According to our own survey, campsites are used by 20% of the respondents (ie younger age groups), while private accommodation was the most popular among the respondents to the Tourinform Office questionnaire.

The questions of the social relations of the travelers and with whom the visitors spend their free time during the trips were also part of the survey. The results are shown in Table 10.

Companion on the trip	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Alone	9%	2.9%	6.1%
With my partner	30%	51.6%	21.6%
With family	45%	34.3%	10.7%
With friends	14%	10.4%	3.6%
Other	2%	0.8%	1.2%

Table 10: Comparison of preferred travel partners

Source: own editing

The biggest difference is in the category with my partner (the data show a difference of 21.6%). This is explained by the fact that the respondents to the Tourinform Office questionnaire were mostly adults who are already living (or can live) as a couple, or the older age group is already vacationing without children and with a couple (probably no children in this category or their children have flown out of the family nest). The vast majority of respondents to our questionnaire are young people before whom the issue of relationship is still unfolding.

The second significant difference is in the family category with 10.7 percent, where the number of respondents shifts in the direction of my own survey. According to the previous explanation, a large part of the younger age group cannot even afford an independent holiday due to their income, so in most cases young people travel with their families. The difference in the response rate alone was 6.1%. The respondents were from the younger age group in the case of our questionnaire, yet more people are taking the only trip. The explanation for this, in our opinion, is that probably some of those who come to festivals (parties and city events) come to the city alone and also leave the city after a short (a two-day) program. Traveling with friends showed a 3.6 percent difference, a negligible difference.

Examining the time spent during the holiday, we can find a very large variance in the comparison by analyzing the differences between the different categories. The results obtained are shown in Table 11.

Preferred programs	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Hungarospa bath use	31.2%	27.1%	4.1%
Visiting restaurants	18.9%	12.5%	6.4%
Gastronomy	7.9%	10.6%	-2.7%
Local market	1.2%	8.1%	-6.9%
Concert visit	22.5%	4.2%	18.3%
City events	8%	12%	-4.3%
Sports program	3.6%	0.6%	3.0%
Museum visit	0.4%	5%	-4.6%
Sightseeing	1.6%	3%	-1.4%
Excursion to Debrecen	2%	8.2%	-5.8%
Excursion to Hortobágy	1.9%	8.6%	-6.7%
Other	0.7%	0.2%	0.5%

Table 11: Comparison of preferred programs

Source: own editing

Based on the results of our own survey, the most significant were the use of the Hungarospa spa, a concert visit and a visit to restaurants. Visiting the local markets, visiting the sports programs and visiting Hortobágy can be considered negligible. The survey of the Tourinform Office showed almost the same significance as the results obtained. The use of the Hungarospa spa, the visit to restaurants and the gastronomy cover almost half of the answers. Based on the results of the Tourinform Office, sightseeing, visiting the museum and watching sports programs are of minimal importance. Based on the answers to the completed questions, it can be stated that the attractiveness of Hajdúszoboszló, regardless of age, is given by the Hungarospa Bath and gastronomy (special restaurant offers of restaurants).

The analysis of the opinions formed about Hajdúszoboszló is presented in Table 11. The results reflect the wide variety of opinions that tourists have about their time here. Response categories were determined based on experience in our own questionnaire.

General opinion	My survey	Tourinform Office Survey	Deviation (Compared to my own survey)
Bustling	77.4%	68.7%	8.7%
Average	48.7%	37.3%	11.4%
Cheap	3.3%	4.2%	0.9%
Expensive	39.2%	62.7%	23.5%
Well groomed	18.8%	65.8%	47%
Boring	0.18%	5.9%	5.72%
Gray	1.52%	3.5%	1.98%
Poor quality	2.4%	2.2%	0.2%
Rustic	0.1%	2.3%	2.2%

Table 12: Comparison of opinions about Hajdúszoboszló

Source: own editing

4. In conclusion

It can be stated from our survey that Hajdúszoboszló has always been a popular tourist destination for tourists. Hajdúszoboszló has not lost its appeal over time. As a result of continuous development, it is becoming more and more popular in Hungary and abroad (more and more tourists are visiting).

The main attraction of Hajdúszoboszló is the city spa and the services built around it. The city offers a wide range of program opportunities for tourists, accessible to all ages and all walks of life, regardless of income. All tourists can find the right options for their calculations and budget (recreation, meals, accommodation, etc.)

The survey found that the city offers its services primarily to larger groups of friends and families. Visitors for official purposes can enjoy the same range of services as any other tourist. Due to the continuous growth, the number of visitors to the city results in a significant amount of economic income for the municipality (with the exception of the period given by the COVID epidemic). Unfortunately, due to the CORONA virus present in the last two years, the city also had a significant loss of revenue (in tourist traffic). Once the restrictions are lifted, it is hoped that all tourism services will return to pre-virus revenue.

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THE DYNAMICS OF UNEMPLOYMENT DURING THE PANDEMIC. CASE STUDY IN BIHOR COUNTY

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Abstract: *The first part of the article presents a short theoretical approach of unemployment, and the more consistent part is based on the statistical analysis of unemployment at the level of Bihor County. The analyzed period is represented by the years 2019-2021. For the current analysis, we have chosen the problem of unemployment during the pandemic, from a theoretical but also concretely applied perspective, since unemployment represents a complex psychosocial and economic phenomenon, and its dimensions and dynamics highlight the state of a society, but also the concerns for the implementation of active policies, which aim at increasing the employment rate, but also the quality of life. This paper analyzes the dynamics of unemployment in the period 2019-2021, but also the job protection measures implemented by the public employment system. Thus, the objectives of the research consist in the analysis of the unemployment indicators in Bihor County in the pre-pandemic period and in the pandemic period and of the special measures adopted in order to solve the problems generated by the health crisis. The used research method was the analysis of documents; we have analyzed the Activity Reports of Bihor County Agency for Employment (AJOFM Bihor) for the years 2020 and 2021 and the legal regulations adopted in order to protect employees and employers during this period. The analysis of statistical data revealed that the maximum number of unemployed people in the records of Bihor County Agency for Employment (AJOFM Bihor) was recorded in March 2021 (6,280 people), and the unemployment rate on this date was 2.36%. Two measures adopted by the government and implemented by the National Employment Agency through the County Employment Agencies had a major impact in maintaining jobs during the pandemic: technical unemployment and reduced working hours. Thus, in 2021 compared to 2020, the number of employees who benefited from technical unemployment decreased by 5,000 people.*

Keywords: *unemployment, unemployment rate, pandemic, active policies, technical unemployment, reduction of working hours.*

JEL Classification: *A14; E24*

1. Introduction and literature review

Unemployment represents an imbalance between labor demand and labor supply. In modern societies, where the values related to work and those associated with

the workplace are prevalent, it is understood and felt in a negative way (Cochinescu, 2005; Boudon et al., 1996). Among the most important causes of unemployment we can mention the structural decline of industry in a region or a country, which generates changes in the occupational structure and cyclical variations of economic activity, a situation in which companies lay off workers during periods of economic recession (Marshal, 2003). The two causes generate two types of unemployment: *structural unemployment* and *cyclical unemployment*.

Other forms of unemployment include: *insertion unemployment*, which occurs in the case of young people who have never worked before, *recurrence unemployment*, which refers in particular to those young people who within certain relatively short periods become unemployed, then they are employed in unstable and poorly qualified positions, and after a few months they become unemployed again, *frictional unemployment*, characteristic of people who change one job with another, *exclusionary unemployment*, which occurs because of aspects such as lack of qualifications, discrimination, age over 50 years (Preda, 2002; Samuelson and Nordhaus, 2001). Unemployment represents an important source of the decrease in the quality of life, which is why its dimensions and structure cannot be ignored in any country in the world. At the same time, unemployment represents a factor of increasing the segmentation of the labor market, a factor of political and economic instability, but also a factor responsible for the expansion of poverty (Cochinescu, 2005).

In order to reduce the negative consequences of the phenomenon, policies meant to combat unemployment become operational on the labor market, adapted to each stage, integrated within two large groups of policies: *passive policies* represented by granting financial aid and *active policies*, though more expensive "can reduce the unemployment rate and increase socioeconomic productivity" (Buzducea, 2010: 409). Active policies represent specific mechanisms meant to promote employment and take into account aspects such as: the development of work skills through professional qualification, professional requalification and retraining, promoting the spirit of active search, systems to encourage private initiative among the active population, especially among the unemployed, but also policies to support the mobility of labor force, encouraging the accomplishment of public utility deeds, the direct creation of temporary or permanent jobs in the public sector or within non-profit organizations (Giarini and Liedtke, 2001: 113-114).

The government in consultation with social partners have the responsibility of establishing the general coordinates of employment policy in macroeconomic context, and in their efforts to achieve the desired objectives, the authorities can resort to a varied range of mechanisms, institutions and actions (Pârâianu, 2003). The purpose of this analysis is to highlight the evolution and structure of unemployment during the pandemic period, as well as the analysis of some job protection measures, adopted in order to reduce the negative effects of unemployment in Bihor County. Thus, the proposed objectives consist in:

- depicting the absolute and relative evolution of unemployment during the pandemic at the level of Bihor county during the period 2019-2021
- the analysis of the special measures adopted by the Government during the pandemic in order to reduce the effects of the social crisis during the years 2020 and 2021.

The used method was the analysis of the documents provided by Bihor County Agency for Employment (AJOFM Bihor): Activity reports for the years 2020 and

2021 of Bihor County Agency for Employment, Emergency Ordinance 30/2020, with subsequent amendments and additions and Emergency Ordinance no. 111/2021 for the establishment of social protection measures for employees and other professional categories in the context of the interdiction, suspension or limitation of economic activities.

2. Statistical analysis of unemployment during the pandemic, 2019-2021, in Bihor County

Evolution of the number of unemployed during 2019-2021

From the analysis of the monthly stocks for the period 2020-2021, we can notice that since September 2020, the number of registered unemployed had increased considerably. This is due to the first measures, which appeared in August 2020, and which reduced the restrictions and conditioned the granting of technical unemployment only to certain categories of employers, in connection with the fact that, at that time, the reduced working time measure did not exist. Thus, some of the employers affected by the crisis laid off staff who thus entered the agency's records. The peak of the maximum number of unemployed people in the agency's records was recorded in March 2021 (6,280 people), a stock comparable to that at the end of 2017 (6,497 people). In April 2021, along with the appearance of the normative act that changed the percentage of subsidized reduced time from 50% to 80%, some employers opted for the re-employment of laid-off employees or made new hires, and in the months that followed, have applied for the new provision regarding reduced working time.

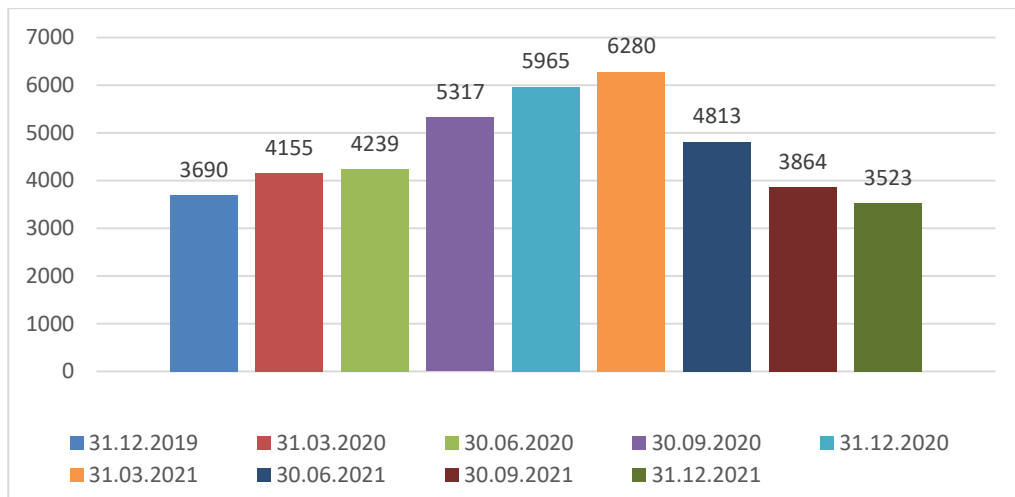


Figure 1 Evolution of the number of unemployed in Bihor County during the period 2019-2021

Source: www.bihor.anofm.ro

Regarding the number of young graduates in the class 2021, the monthly stock can be found in the chart below and we can observe that in 2021, a lower number of graduates entered the agency's records as unemployed beneficiaries of unemployment benefits compared to the previous year. The graduates of 2021

promotion were registered in the records of Bihor County Agency for Employment within 60 days from the date of graduation and the beneficiaries of unemployment allowances were the graduates who did not find work or were not admitted to a higher form of education.

Out of the 146 people in stock on 31.12.2021, 58% were high school or post-high school graduates, 25% professional school graduates and 17% university graduates.

Evolution of the number of unemployed by age group, level of education, duration of unemployment and residence

The analysis of the number of unemployed in the period 2020-2021 by age category shows that at the end of the analyzed period, the highest unemployment rate is registered among people over 50 years old, respectively the categories of age between 50-55 and over 55 years, the percentage of inclusion in the total stock at the end of the year being between 32-40%.

The next category is represented by people aged between 40-49 years (27-28%), followed by the 30-39 year-old category (17-20%).

The people in the 40-49 age category are the people with the highest fluctuation on the labor market. From the comparative analysis of inputs-outputs at the county level, we found that these values are similar, so these people are more mobile on the labor market and change their job depending on a higher salary level, with a higher frequency than other categories of people. At the same time, the employment percentage of this age category is 30% of the total annual employment, so there is a balance between entries and exits per category.

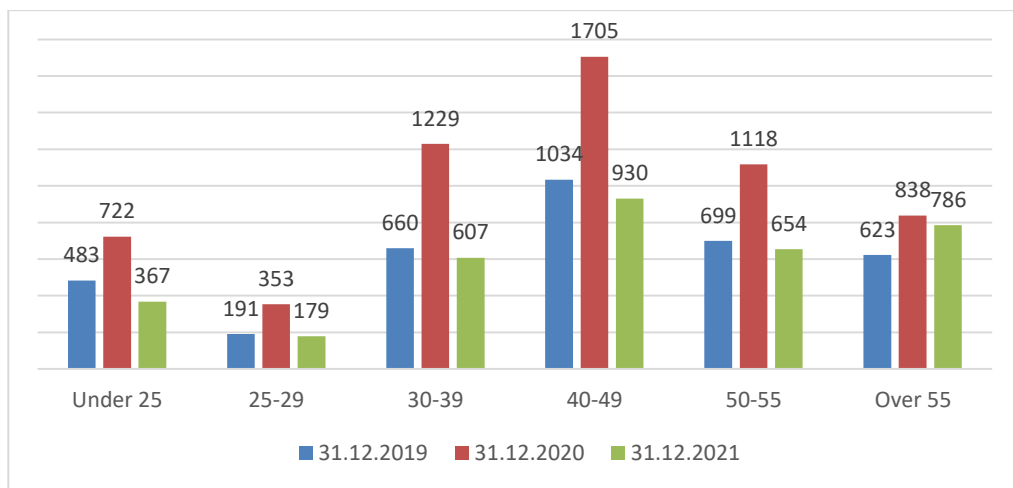


Figure 2 Evolution of the number of unemployed by age category in Bihor County during the period 2019-2021

Source: www.bihor.anofm.ro

Regarding the structure of unemployment according to the level of education, an analysis was carried out on the two types of benefit, unemployed with benefit and unemployed without benefit.

Unemployed people with benefits

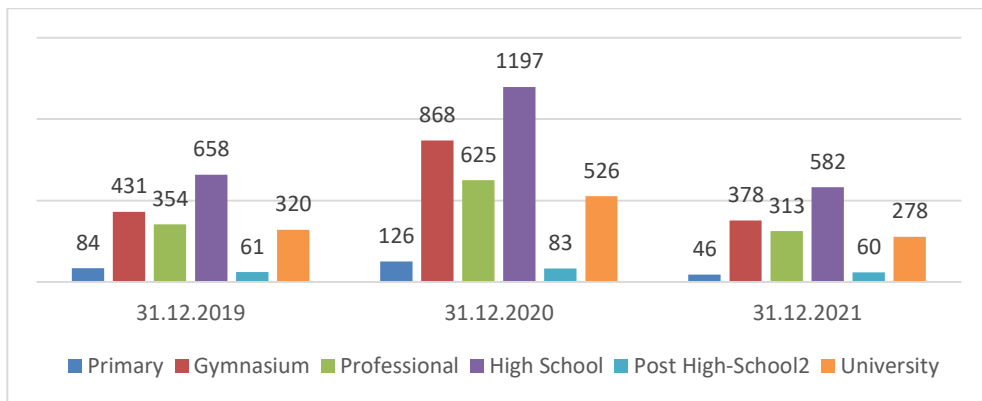


Figure 3 Evolution of the number of unemployed people with benefit, according to the level of education, in Bihor County, during the period 2019-2021

Source: www.bihor.anofm.ro

In what concerns the structure of unemployment according to the level of education for the unemployed with benefits, high school level of education occupies the first place with 34% of the total number of unemployed people with benefits, followed by the unemployed with secondary school level of education - 23% and the professional school level - 18%.

Unemployed without unemployment benefit

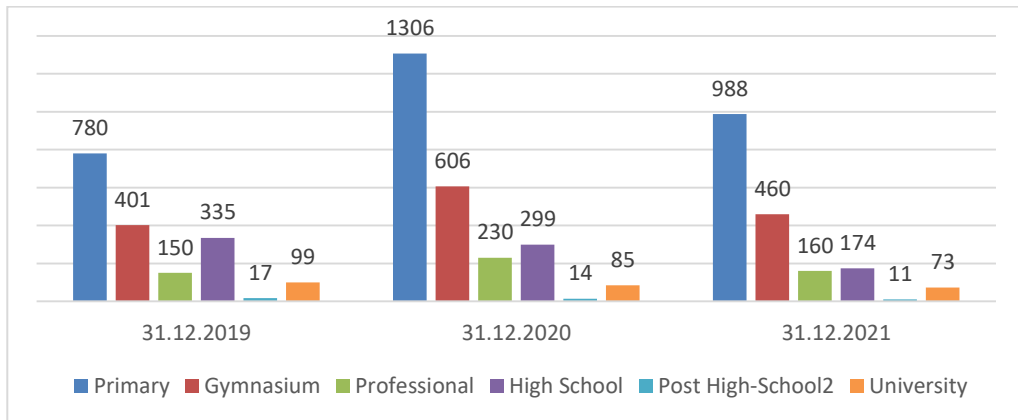


Figure 4 Evolution of the number of unemployed people without benefit, according to the level of education in Bihor County during the period 2019-2021

Source: www.bihor.anofm.ro

Regarding the structure of unemployment according to the level of education in the case of the unemployed without benefit, the unemployed with primary school education level occupy the first place with 50% of the total number

of unemployed without benefit, followed by the unemployed with secondary school education level - 23% and the high school graduates - 13%. In proportion of 85-90%, these people were registered in the agency's records with the following occupations: unskilled worker in the clothing industry, unskilled worker in the demolition of buildings, masonry linings, mosaic tiles, parquet, unskilled worker in the assembly, installation of parts, unskilled worker in breaking and cutting construction materials, unskilled worker in packing solid and semi-solid products. These occupations are found in the first 20 occupations from the situation of termination of employment contracts communicated by employers. From the total number of unemployed people without benefit registered in the agency's records, between 22-28% are people without studies, they are beneficiaries of the guaranteed minimum income. For these people, employment on the labor market is difficult because employers offer jobs for people with minimum level of secondary school education and the access to professional training programs is conditioned by the level of education, respectively at least primary school.

Evolution of the number of unemployed during 2019-2021, according to the duration of unemployment

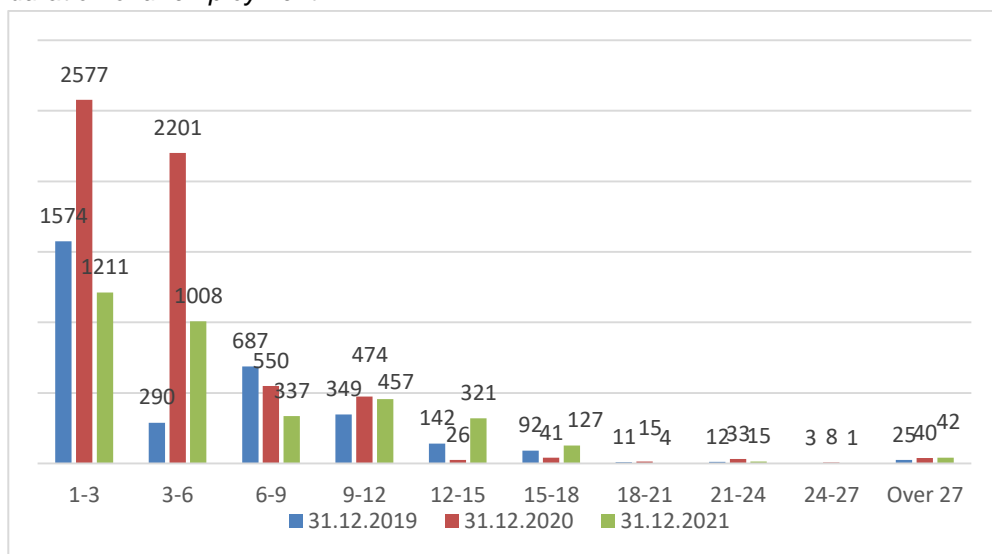


Figure 5 Evolution of the number of unemployed, according to the duration of unemployment, in Bihor County, during the period 2019-2021

Source: www.bihor.anofm.ro

From the analysis of the final stocks and the unemployment period of a registered person, it can be observed that over 40% is occupied by people with a duration of unemployment between 1 day and 3 months. These people come from disadvantaged categories (over 45 years of age, young NETTS) for whom employers request the financial incentives provided by art.80 and art.85 of Law 76/2002 with subsequent amendments and additions. From the monthly statistical data on employment at the Bihor county level, it is found that out of the total number of mediated and employed persons, 34% are employed after the first mediation. We can also notice that, if in 2019, 70% of the employed people are

unemployed without benefit, in 2021 the share between the unemployed with benefit and those without benefit is equal.

Evolution of the number of unemployed in the period 2020-2021 by residence environment

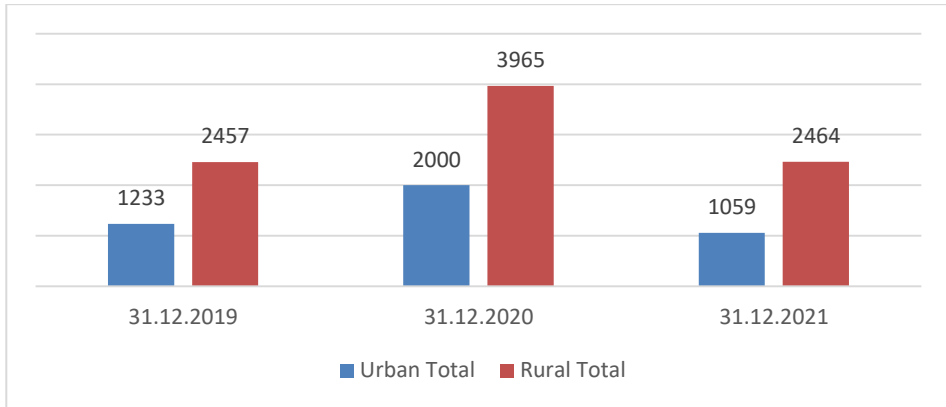


Figure 6 Evolution of the number of unemployed in the period 2019-2021, in Bihor County, by residence environment

Source: www.bihor.anofm.ro

The registered unemployment rate for the period 2019-2021

Bihor County is among the counties with a low registered unemployment rate and a relatively low number of unemployed.

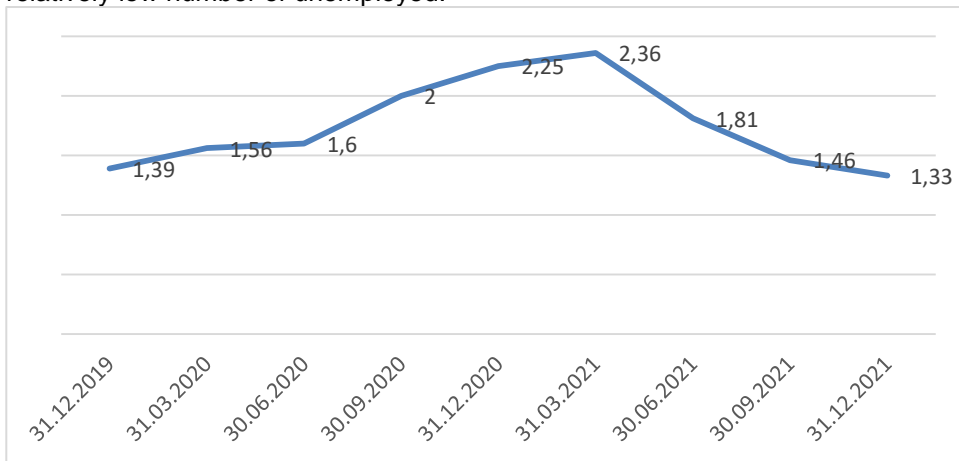


Figure 7 Evolution of unemployment rate, in the period 2019-2021, in Bihor County, by residence environment

Source: www.bihor.anofm.ro

At the end of December 2021, the unemployment rate registered at the county level was 1.33%, being 0.92 p.p. lower than the unemployment rate in the same month of the previous year and approximately equal to the unemployment rate registered on 31.12.2019 (1.39 %). The unemployment rate is influenced both by

the number of unemployed registered in that month and by the active civilian population at the level of Bihor county.

A proportion of 85-90% of the uncompensated unemployed registered in the agency's records had the following occupations: unskilled worker in the clothing industry, unskilled worker in the demolition of buildings, masonry linings, mosaic tiles, parquet, unskilled worker in assembly of parts, unskilled worker in breaking and cutting construction materials, unskilled worker in packing solid and semi-solid products.

This fact led to the classification by occupations/unemployed who were at least 1 day in the agency's records. In 2020, 62% of the unskilled workers were in the agency's records for at least 1 day, and in 2021, 66%, came from the category of primary or secondary school education and the category of unemployed without benefit.

3. Analysis of job protection measures

The health crisis imposed the need for a legislative framework adapted to the special situation caused by the COVID-19 pandemic, in which the state actively intervened, with the declared aim of preserving jobs and supporting employees and employers in exceptional situations, as a consequence of the restrictions imposed by the measures necessary to limit the spread of the infection.

A special situation, which fully proved its effectiveness, was that of technical unemployment, as an alternative solution to the termination of the employment contract for the employees in sectors with restricted activity. Thus, from the unemployment insurance budget, Bihor County Agency for Employment (AJOFM Bihor) paid 75% of the value of gross salary (limited to 75% of the average gross salary earnings, per country), to employees who benefited from technical unemployment, as a result of the restrictions imposed by the epidemiological situation. The payment was made in accordance with the provisions of Emergency Ordinance 30/2020, with subsequent amendments and additions and Emergency Ordinance no. 111/ 2021 for the establishment of social protection measures for employees and other professional categories in the context of the interdiction, suspension or limitation of economic activities, determined by the epidemiological situation generated by the spread of the SARS-CoV-2 coronavirus.

In 2020, the most affected branch was hotels and restaurants, both in terms of number of people (7,455 people) and number of employers (917 employers). The manufacturing industry also registered a considerable number of people receiving technical unemployment (3,131 people) for a number of 72 employers (Bihor County Agency for Employment /AJOFM Bihor, 2020). In 2020, the total number of employees affected by technical unemployment was 16,005 people, and in 2021 this number decreased with 5,000. At the same time, the number of employers increased in 2021 compared to 2020 because the measure became well known and small companies accessed it (e.g. guesthouses and small accommodation units, bars and other services).

From the analysis of technical unemployment by branch and CAEN code, we can notice that hotels and restaurants occupy the first place in both cases, both in terms of number of employers and number of employees. In 2021, in the case of restaurants, the number of employee beneficiaries increased compared to 2020,

because the legislative modifications in 2021 allowed restaurants to continue the technical unemployment program, according to the degree of incidence of the disease, while other activities were no longer eligible (Manufacture of furniture, Manufacture of other parts and accessories for vehicles and motor vehicles, Manufacture of other plastic products, Retail trade of footwear and leather goods, in specialized stores).

GEO 132/2020 with the subsequent amendments and additions is the normative act that establishes flexible work in Romania according to a model of German inspiration, called Kurzarbeit, which aims to reduce the negative impact on the labor market, produced by the health crisis, and to maintain the mandatory measures that aim to reduce the spread of the SARS-CoV-2 virus. The ordinance was conceived to support both employees and employers (Bihor County Agency for Employment /AJOFM Bihor, 2020).

According to it, if the company's turnover decreased by at least 10%, compared to the month before the application of the measure or, at most, in the month before the previous month, compared to the similar period of the previous year, the employer can order unilaterally, the reduction of working time for at least 10% of employees. Under these conditions, the employers benefited, from the unemployment insurance budget, of an allowance of 75%, which represents the difference between the gross basic salary, stipulated in the individual employment contract, and the gross basic salary corresponding to the hours of work performed, as a result of the reduction of working time.

The normative act entered into force in October 2020 and ran throughout 2021. Employers who no longer met the conditions for being granted technical unemployment benefited from this measure: manufacturing industry, wholesale and retail trade; motor vehicle and motorcycle repair, administrative service activities and support service activities, professional, scientific and technical activities etc. In addition to the health crisis, employers in the manufacturing industry were affected during production processes, by dysfunctions regarding the supply of raw materials and materials from external, European or global suppliers. Also, the lack of orders determined employers to access this measure. Hotels and restaurants, which were not eligible for technical unemployment, resorted to this measure because the turnover was 10% lower than in 2019. The professional, scientific and technical activities branch included all liberal activities (lawyers, actors, beauty parlors etc.) and were managed by Bihor County Agency for Payments and Social Inspection.

In 2021, the number of employers in the administrative service activities and support service activities branch has grown considerably (over 800%). This category includes consultancy firms and accounting firms, which became eligible and massively applied for this measure. The 2020-2021 crisis period also overlapped with an inactive period regarding the attraction of European funds, no financing lines were launched, and that is why the consulting companies, with the fulfillment of the legal provisions regarding the turnover, had benefited from the reduced time measure.

Other protection measures for employees and employers carried out during the years 2020-2021 were: support for work for a determined period, telework, leave for child supervision, incentives for hiring the unemployed (Bihor County Agency for Employment / AJOFM Bihor, 2021). Also, the active measures provided by Law no. 76/2002 regarding the unemployment insurance system and

employment stimulation, with subsequent amendments and additions, had a major impact in maintaining the number of some employers' employees.

4. Conclusions

The analysis of job protection measures and of statistical data regarding the absolute and relative evolution of unemployment in Bihor County during the pandemic enables us to formulate the following conclusions:

- The number of registered unemployed increased starting from September 2020, and the highest number of unemployed registered at Bihor County Agency for Employment (AJOFM Bihor) was in March 2021, 6,280 people, corresponding to an unemployment rate of 2.67%
- The share of the unemployed without benefit in the total number of unemployed is 53%.
- People over 50 years of age represent 41% of the total unemployed (in 2021), 9% more than in 2020.
- At the end of 2021, the highest unemployment rate is recorded among people in the over 50 age category (41%), followed by the 40-49 age category (26%) and the under 25 category represents only 10%.
- More than 40% of the total unemployed is represented by people with a duration of unemployment between 1 day and 3 months. These people come from disadvantaged categories (over 45 years of age, young NETTS)
- More than 70% of the total unemployed without benefit are people with primary school education level (without studies and incomplete primary school) and 30% are without education.
- The persons registered in the agency's records who have an 'easy' employability level, come from the category of persons with vocational, post-high school or university education.
- 65% of the average number of unemployed are from rural areas.
- The number of technical unemployment beneficiaries decreased in 2021 compared to 2020.
- Hotels and Restaurants are in the first place both in terms of the number of technical unemployment beneficiaries and employers.
- We notice an increase in the number of employers for the Administrative services activities and Support services activities branch in 2021 compared to 2020.
- Accessing the measure *Reduced time* due to the lack of raw materials and materials.
- The branches in which technical unemployment was insignificant are the following: water distribution; sanitation, waste management, decontamination activities, financial intermediation and insurance, public administration and defense; social insurance from the public system, extractive industry, health and social work.

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THE IMPACT OF THE CRISIS CAUSED BY THE COVID-19 INFECTION ON THE BUSINESS ENVIRONMENT

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Abstract: *This paper intends to analyze how the crisis produced by the Covid-19 infection has influenced the employees, respectively the employers. Thus, we try to see if they still approach the workplace, working hours, etc. in the same way or if their perception has been decisively influenced by this crisis. Certainly, there is an impact on the business environment around the world, respectively in Romania. Thus, employers and employees, like the whole world, had to adapt and reorganize in the given conditions. Some views support the theory that, for employers and employees respectively, nothing will be the same, and the approach and expectations of both parties will be different. Other views argue that this crisis will not cause major changes in perception on the subject. Be that as it may, through this paper we try to analyze in what way and above all, what changes this crisis has produced on the employees, respectively the employers. For the most part, for the employee, the workplace is the place from where he procures an important part or even all of his financial resources. Besides, the workplace is also the place where he can prove his skills acquired in school, the place where he socialises, the place where he develops professionally and not only that. The employer, in general, wants a competent and efficient employee. Both regarding employees and employers, the crisis caused by the Covid-19 infection has produced important changes that we will study in the analysis below. The business environment around the world has seen changes with the situation caused by this crisis that has faced all of humanity. Also, before analyzing, in broad terms, the impact on the business environment, we must observe how people saw the involvement, from a diplomatic point of view, in Romania's economic development. Economic development must also be supported at the diplomatic level, not only through the other available levers.*

Keywords: *Employees; employers; business environment.*

JEL Classification: F20; F23; I12; L20.

1. Introduction

The business environment is a vast and complex environment. It consists of a group of companies, of different sizes, that operate in various areas of the world, operating in one of the most extensive fields. The world economy is quite different

from what it was just five years ago. Some of the reasons include an over-all slowdown in the triad economies, the introduction of more local and international trade regulation, the impact of technology and the rise of small and medium sized multinationals (Rugman and Collinson, 2006, p.12). Another opinion refers to the changes that impact the business environment, thus the changes in the environment can cause changes in inputs, in the transformation process and in the outputs and these in turn may engender further changes in the organisations environment. The internal and external environments should be seen as interrelated and interdependent, not as separate entities (Worthington, Britton, 2009, p.12). So, through this research we wanted to see if the Covid-19 pandemic impacted employees and employers, as well as if our diplomacy intervened in any way to support the business environment, implicitly employees and employers.

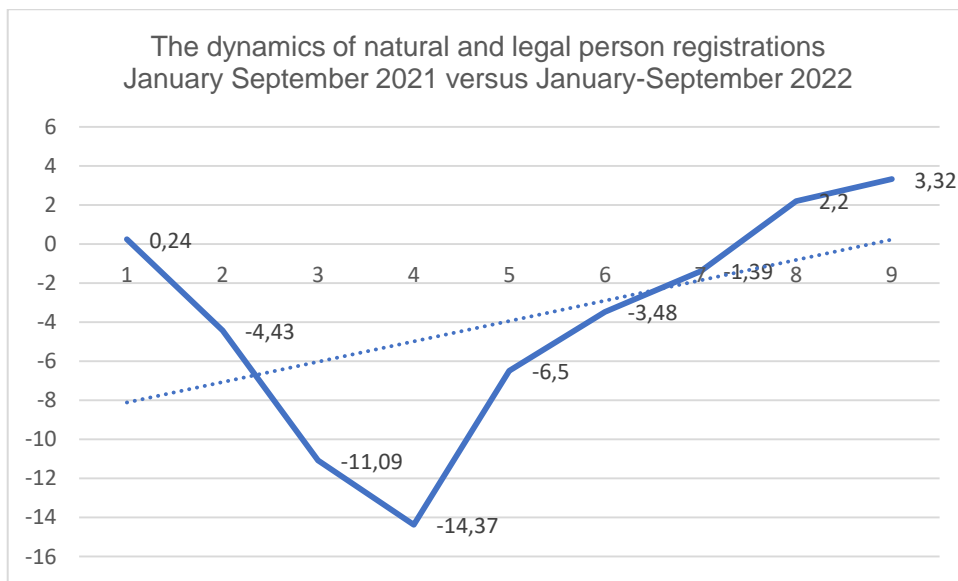
2. Research methodology

In this sense, we applied a questionnaire, between July and August 2022, to which 216 people responded regarding various aspects, such as: economic development, the diplomatic environment, the economic environment, etc. The activity in the diplomatic sphere is in a constantly changing, in accordance with the events taking place in the world. So, it is necessary to inform ourselves properly, that is, from verified sources and, as much as possible, in real time about what is happening in the world. The frequency with which information about these events takes place by the people questioned is as follows: a number of 119 people are informed periodically about what is happening in the world, 37 are informed weekly, 28 are not informed at all in this regard, 23 of the people surveyed inform themselves daily to be up to date with all the news and events, respectively 9 people inquire monthly about what is happening in the diplomatic sphere.

3. Results

If we want to mirror the percentage, this situation presents itself as follows: the highest percentage, 55.1%, belongs to those who regularly inform themselves about what is happening in the diplomatic sphere, followed by 17.1% made up of those people who inform weekly, 13% do not inform themselves at all, and 4.2% inform themselves monthly. It is very important that when information is provided, especially on events of a diplomatic nature that take place in the world, we see the sources used. Therefore, 75.9% of the people surveyed stated that they use the Internet, information presented on TV, etc. as a source of information. The written press, newspapers, magazines, etc. are consulted by 10.2% of those surveyed. From the ministry, competent institutions, etc. 8.3% get their information, respectively 5.6% get information from family, friends, colleagues, acquaintances, etc. Regarding the economic development of Romania, an overwhelming percentage of 96.3% are of the opinion that diplomacy should be involved in matters related to this subject, in contrast to 3.7% who are of the opinion that diplomacy should not why get involved in matters regarding the economic development of our country. Next, we notice that among those questioned regarding the information about the diplomatic environment in Romania, they obtain their information from various sources. So the internet, TV etc. generates the percentage of 75.5% of those who turn to this source of information. A

percentage of 10.6% get their information through the Ministry of Foreign Affairs of Romania, institutions, etc. Print media, newspapers, specialized magazines, etc. are used by 8.8% of those surveyed, and 5.1% get information from family, friends, colleagues, acquaintances, etc. Informing and retrieving information about the diplomatic environment in Romania is carried out periodically by 63.4% of the people surveyed, respectively weekly by 13.4%. 8.3% of those surveyed declared that they do not get informed about this topic at all, 7.9% get informed daily, and 6.9% said they get informed monthly about the environment and diplomatic activity. Regarding the constructive changes that the involvement of diplomacy in Romania's economic environment has produced, there are a series of answers categorized into four categories. Thus, in the first category, i.e. 33.3%, are included the responses of those who believe that the involvement of diplomacy in Romania's economic environment has produced, for the most part, constructive changes. The second category, 28.2%, includes the responses of those who believe that the involvement of diplomacy in Romania's economic environment produced, to a small extent, constructive changes. In the third category, 25.5%, are included the answers of those who believe that the involvement of diplomacy in Romania's economic environment produced only constructive changes. The last category, 13%, includes the responses of those who believe that the involvement of diplomacy in Romania's economic environment has produced only negative changes. The assessment that the involvement of diplomacy in economic development has positively influenced the activity/mode or quality of life and other aspects is reflected in the responses below. Thus, on a scale of 1 to 5, where 1 means not at all and 5 means completely, the answers are among the most varied. Thus, 14.4% of the respondents are of the opinion that the involvement of diplomacy in economic development did not positively influence the activity/mode or quality of life and other aspects at all. To a small extent, 14.4% of those surveyed believe that the involvement of diplomacy in economic development positively influenced their activity/mode or quality of life and other aspects. To a large extent, 37.5% think that the involvement of diplomacy in the part of economic development influenced their lives. For 24.1%, the involvement of diplomacy in economic development influenced their lives to a very large extent, and for 9.7%, the involvement of diplomacy in economic development influenced their lives, positively, completely. The involvement of the state or its representatives, in the realization of several projects or objectives, would influence the economic growth and development of Romania, according to 73.1% of those surveyed. Another part, more precisely 4.6%, believes that this involvement would not influence the economic growth and development of Romania, and 22.2% cannot appreciate, at the time of applying the questionnaire, this aspect. The link between diplomacy and the business environment is directly proportional, because, especially in the context of the COVID19 pandemic, the involvement of diplomacy contributes to development. The business environment always needs the contribution of diplomacy to initiate new directions of development or to support the already existing ones. At the same time, a brief look at the number of registrations of natural and legal persons in Romania, in the period January-September 2022 compared to January-September 2021, shows us the following dynamics:



Source: <https://www.onrc.ro/index.php/ro/statistici> accessed in 14.11.2022.

Registrations in the period 01.01.2022 - 31.01.2022 compared to the same period of the year past: 0.24%, registrations in the period 01.01.2022 - 28.02.2022 compared to the same period last year -4.43%, Registrations carried out in the period 01.01.2022 - 31.03.2022 compared to the same period last year: - 11.09%, registrations made between 01.01.2022 - 30.04.2022 compared to the same period last year: -14.37%, registrations between 01.01.2022 - 31.05.2022 compared to the same period last year: -6.50%, registrations made in the period 01.01.2022 - 30.06.2022 compared to the same period last year: -3.48%, registrations made in the period 01.01.2022 - 31.07.2022 compared to the same period last year: -1.39%, matriculate lars in the period 01.01.2022 - 31.08.2022 compared to the same period last year: 2.20%, registrations made in the period 01.01.2022 - 30.09.2022 compared to the same period last year: 3.32%.

In this context, registrations refer, for example, to: authorized natural person, sole proprietorship, limited liability company, joint-stock company, collective limited company, simple limited company etc. Every business organisation has to interact and transact with its environment. Hence, the business environment has a direct relation with the business organisation. Obviously, then, the effectiveness of interaction of an enterprise with its environment primarily determines the success or failure of a business (Saleem, Cavusgil, Tietenberg, Chandhoke, Hollensen, 2010, 1.2).

4. Conclusion

The Covid-19 pandemic directly impacted the business environment, employees and employers, restructured activities, modified work schedules and introduced working from home as a normality, and not an exception, with the advantages and

disadvantages of rigour, on both sides. Once the pandemic was over, all of humanity reset. The companies adapted on the fly, so that if before the pandemic they had an object of activity, during the pandemic they adapted and produced what was needed at the time, such as: sanitary and protective articles, hygiene products and others. In conclusion, during the pandemic, diplomacy would have had an opportune moment to demonstrate support for the business environment, for employees and employers. For now, the involvement and support of diplomacy is not highlighted in the business environment. An appropriate involvement at the external level would determine at the internal level positive results on the business environment, on employees and employers.

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INFLATION - A MACROECONOMIC CHALLENGE

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Abstract: *Inflationary pressures, but also the uncertainty regarding the duration and severity of the Covid-19 pandemic, have significantly increased in the last year. Moreover, the start of Russia's war against Ukraine on February 24, 2022, further called into question the upward trend in the inflation rate. In this sense, the sudden and continuous increase in energy, fuel, and food prices constitute new challenges for decision-makers. The purpose of this paper is to analyze the evolution of inflation in Romania from the period 1990-2022 because this constitutes a topical macroeconomic challenge. Compared to the way of presenting the information from the bibliography used and found at the end of the paper, in this paper only the essential aspects, the particularities of the chosen research topic, which finally provide an overview, can be found.*

Keywords: *inflation; challenge; Covid-19; uncertainty; volatility;*

JEL Classification: *E31; E58;*

1. Introduction

Inflation is one of the main tools of the functioning mechanism of market economies. This is also a very complex phenomenon because over the years it has revealed different forms and causes, and with its appearance, it also brings quite strong consequences to the entire economic system. This growth is differentiated according to the categories of economic goods in circulation on the market, according to the services of the production factors in various territorial markets. Also, inflation represents the macroeconomic imbalance that can be found at the level of any state, being of a monetary nature and evident by the decrease in purchasing power, but also by a strong increase in prices, thus affecting all people. Direct inflation targeting is a modern phenomenon, which was discussed at a theoretical level during the 1980s, and New Zealand was the first country to adopt this new strategy in 1989. About 20 countries have adopted this strategy to date, even if there are technical differences from one state to another, each country has different annual inflation rates as follows Great Britain, Canada, Brazil, Finland, and Spain had inflation less than or equal to 5%, while Israel and Chile were experiencing inflation of around 20%, and Poland, the Czech Republic, and Hungary had annual inflation of around 10%. Beginning in the mid-1990s, emerging and developing countries made the transition from exchange rate targeting to monetary aggregate targeting. In August 2005, following the completion of the preparation process, the last stage of which was the testing and

creation of the framework for economic analysis and monetary policy decision, the new strategy based on direct inflation targeting was adopted by Romania, and the steps necessary to implement the new strategies lasted 16 months. The abandonment of the strategy based on the targeting of monetary aggregates was caused by the disintegration of the existing relationship between aggregates and inflation, the accelerated remonetization in conditions of moderate inflation, the privatization of the banking sector, and the liberalization of capital flows. Also, the period of transition to the market economy, after 1990, presents the inflationary phenomenon that had a strong intensity on the economy of the states that were in this situation, creating at the same time a complete economic circuit, in which the period of overheating of the economy can be found from 2007-2008, followed by the recessionary period of 2009.

It should be noted that after the adoption of the new strategy, the high rates of inflation have decreased considerably, which is also the purpose of this new regime. However, the new economic context strongly influenced by the outbreak of the Covid-19 pandemic and the war in Ukraine caused a strong increase in the inflation rate and affected the standard of living of the population, which currently constitutes a macroeconomic challenge.

This paper aims to study and analyze the evolution of inflation and its impact on the economic environment in Romania. The present paper is structured in several distinct parts, as follows: (i) in the first part there is the introduction, (ii) in the second part the specialized literature, (iii) in the third part the research methodology, (iv) in the fourth part is the case study, (v) and the last part contains the conclusions.

2. Specialty literature

The inflationary phenomenon is one that has been considered a controversial subject by many economists, each of them supporting their point of view regarding this process and thus highlighting the effects and ways to reduce it. An eloquent example can be represented by the conception of the authors Richard G. Lipsey and K. Alec Chrystal reproduced in the book entitled "Positive Economy" in which they argue that inflation, unemployment, and growth represent the fundamental problems facing the economy in the current period. Regarding the unemployment rate and the inflation rate, these two are in close correlation with each other, since the decrease in unemployment inevitably leads to an increase in the inflation rate, and regarding the decrease in inflation, this was accompanied in most cases by a level of high unemployment. "Macroeconomic policy can really be like that, like trying to walk on a very narrow bridge where inflation is on one side and unemployment on the other".

Another established author in economics, Paul Samuelson, who received the John Bates Clark Medal in 1947 and the Nobel Prize for Economics in 1970, brings to the fore in his book "Economics-19-e", together with William Nordhaus, their view of inflation. The inflationary phenomenon appears when the economy registers an increase in the general level of prices. Their opinion is based on the idea that "Inflation is as old as market economies", so that over time it has affected each state in different proportions, manifested itself in various forms, and led to the emergence of new changes. Also, the two great economists claim that the impact

of the inflationary phenomenon was very well highlighted through the concept of John Maynard Keynes: "Considering that inflation is a continuous process and that the real value of the currency fluctuates wildly from one month to the next, all the permanent relations between debtors and creditors, which form the final foundation of capitalism, thus become so disordered as to be almost meaningless". With regard to Keynesian thinking, the inflationary process is viewed through the prism of the evolution of macroeconomic indicators, as well as real macroeconomic flows, and the tendency to increase market prices are associated with the use of labor. A defining idea of this book regarding the rate of inflation is that it has the ability to persist over time for quite a while and at the same rate, especially in modern economies.

Samuelson argues that inflation occurs like a disease for many reasons, with no single source. Part of inflation is due to demand and the other part is due to supply. Since it can be said that this phenomenon is so complex because it is influenced by several factors, it takes place at an internal level, and with its appearance, it also leads to quite high costs. An example he presented in his book with Nordhaus was the analogy between a dog and the inflationary process. Inflation is described in correlation with an old and lazy dog. In the situation where the dog is not "shocked" either by hitting or by means of a cat, it will still remain in its original place. But if it has been disturbed, the dog will drive the cat away and stay in that place until the next shock occurs. Through this idea, the authors want to highlight the fact that inflation occurs most of the time due to an impulse. In this work, Samuelson also presents the concept of hyperinflation, which is encountered at the moment when "the printing presses produce money and prices begin to rise several times every month". Hyperinflation has historically been likened over the years to a revolution or a war.

Can be seen that in the book "Economics" the two authors emphasized the idea that the inflationary phenomenon leads to distortions of interest rates, and tax rates, and last but not least, it also leaves its mark on relative prices. Inflation is not considered a favorable phenomenon either for the population or for the economy, because it affects the redistribution of income and wealth and obviously causes a decrease in the efficiency of the economic activity of a state.

Inflation is a phenomenon that occurs in the economy when there is an increase in the general level of prices. According to the concept of Paul Samuelson and William Nordhaus, stated in the book "Economics-19-e", they claim that "Inflation is as old as market economies" because it appeared over the years and affected the economy of the states considerably.

Inflation has become a complex process because it highlights forms, and causes, and brings with its appearance quite strong consequences on the economic system. Inflation also highlights the fact that there is a money supply in circulation that exceeds the needs of the economy and therefore these consequences are reflected in the price level and the purchasing power of money.

Regarding inflation, the generalized increase in prices is different depending on the categories of economic goods and services of the production factors existing in the economy, such as consumer goods, capital goods, prices of real, monetary, financial assets, etc. Also, in this process not every increase in prices is considered inflation, the increase must be cumulative and permanent.

3. Research Methodology

This part of the presentation of the research methodology aims to facilitate the completion of the next stages of the work by highlighting the methodology and the database used, as well as the sources of information. The present work was carried out through a mixed research methodology, as it is based on qualitative and quantitative data. More precisely, through quantitative data, macroeconomic analysis of the case study was carried out, these data being entered into the Microsoft Excel program to create graphs that allow easier identification of the evolution of macroeconomic indicators. Regarding the qualitative data, they consisted of the descriptive analysis method used for the literature review, and several platforms were used for this stage, including Enformation, which includes a diverse base of platforms such as Scopus, ProQuest, ScienceDirect, and many others. The time period analyzed is between 1990-2022, as the aim was to highlight the maximum levels of inflation recorded.

4. Case Study

4.1. The impact and economic effects of inflation

The economic effects of the inflationary process differ from one economy to another depending on the economic policies adopted, the degree of development of each country, as well as the ability of governments to manage and control inflation as a whole. Regarding the analysis of the consequences of inflation, this is difficult to do, because while some economic agents gain considerably from inflation, the other part stands to lose. Thus, the intensity of the effects is closely related to the intensity of the inflationary phenomenon. It should be noted that in conditions of inflation, prices and wages do not change in the same proportion, as there are changes in the level of relative prices. As a result of this change, two effects of inflation were identified, such as the redistribution of income and wealth of the population between different groups and differentiations occurring at the level of prices and production of various goods and services.

There are many areas that are affected due to inflation. For example, the distribution of income and wealth at the level of a state, as major differences occur between the assets and liabilities they hold. Also, unexpected inflation is the one that benefits debtors, but also creditors, they are not as affected as in the previous period, because there are many types of debt that have interest rates that move up and down with the rates of market interest. An example can be represented by variable rate mortgages. In most cases, windfall inflation helps borrowers and hurts lenders because it redistributes income and wealth from lenders to borrowers. The redistributive impact of inflation is primarily due to its effect on the real value of people's wealth. In the case of unanticipated deflation, the impact is opposite to that encountered in the case of unanticipated inflation, this time those who suffer are the debtors and not the creditors. Inflation affects not only the distribution of income but also the real economy in two important areas, such as economic efficiency and total output, both of which are essential because they lead to the

sustainability of the economic system. Regarding economic efficiency, inflation impacts this area because it changes the price level. Another example can be the situation wherein an economy there is low inflation, if the price of a good on the market increases, both buyers and sellers will notice that there has been a change in the supply/demand conditions for that good in the market and can act accordingly. Otherwise, when there is high inflation in the market it is much more difficult to differentiate the changes that occur at the level of relative and global prices.

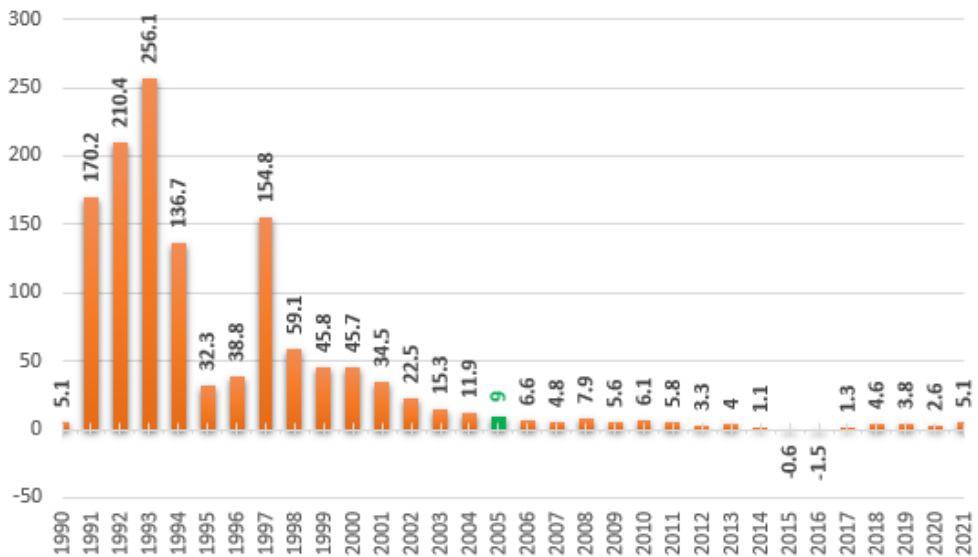


Figure 1: The evolution of the inflation rate in the period 1990-2021 (%)
 Source: Author processing based on data provided by INS

As can be seen from the attached graphic representation, the inflation rate fluctuated significantly throughout the analyzed period, registering the level of 5.1% in 1990, and after this year it registered very high values, the memorable year being 1993, at the level whose inflation reached a value of 256.1%. In this sense, due to the high level of inflation, investments were discouraged based on the uncertainty of the economic environment, the exchange rate of the national currency depreciated in relation to the currency, the trade balance became a deficit, and unemployment increased. The pandemic shock, together with the measures implemented by the policymakers, have led to an increase in costs for certain sectors. Because the shock was multidimensional, namely originating from domestic and external sources, and having a negative impact on both demand and supply, the policy response was unprecedented, leading to a considerable increase in inflation. In the second quarter of 2022, the inflation rate reached 6.3%, 5 times higher than the level recorded in the same quarter of the previous year (2021). In this context, the economic environment was strongly affected and the standard of living of the population deteriorated, even more, the majority of the population is strongly affected by the increase in food, energy, and fuel prices.

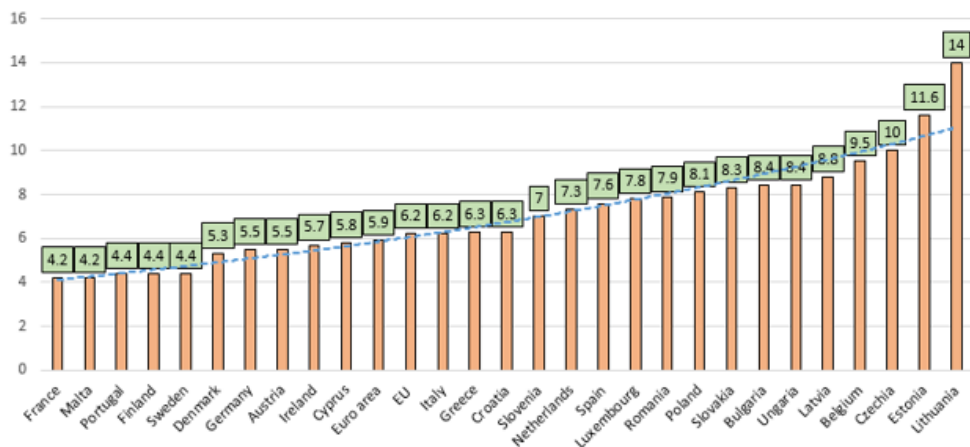


Figure 2: Annual inflation rates (%), in February 2022
Source: Author processing based on data provided by Eurostat

In accordance with the statistical data published by Eurostat, in February 2022, Romania ranked 10th among the member countries of the European Union in terms of inflation. With a value of approximately 7.9%, resulting in accordance with the European methodology for comparability with other countries, Romania was above the European Union average of 6.2% or the Euro Zone average of 5.9%, but favorably compared to eight countries belonging to the former Soviet bloc and Belgium with 9.5%. It should be noted that in 2022 the highest annual rates of price increase were achieved by the Baltic states, Lithuania at 14%, and Estonia at 11.6%, these being the only countries that exceeded the 10% threshold. This limit was reached by the Czech Republic and Lithuania with 8.8%, Bulgaria and Hungary with 8.4%, Slovakia with 8.3%, and Poland with 8.1%, decreasing from the value of 8.7% recorded at the end of the month of January.

In terms of the minimum benchmark, the lowest annual inflation values were recorded by France and Malta at around 4.2%, as well as Portugal, Finland, and Sweden at 4.4%, the only countries that were below the threshold of five percentage points. In light of what was previously discussed, the main commercial partners of Romania can also be mentioned, namely Italy with 6.2% and Germany with 5.5%. At the same time, it is important to mention that Romania, despite the negative effects propagated by the Covid-19 pandemic and the global economic context, managed to mitigate somewhat better, compared to other years, the unfavorable conjuncture for energy worldwide. From the point of view of the transition to the euro, it can be argued that the fixed parity did not help Slovakia, Bulgaria, and the Baltic States at all. Postponing the Czech Republic was not a suitable solution in this context either, given the fact that until the end of 2021, it recorded a historical level of inflation rate, of approximately 4.6% in January 2022, the Maastricht criteria not being the fundamental problem. Moreover, within the competition at the European level, Romania was not in a favorable position from a statistical point of view, given the fact that the weights used on the large groups of services and products are in close correlation with the stage of development of the

economy, respectively the well-being of the population and the incomes obtained at the local level. These are, without a doubt, higher in Romania on the side of food products that are included in the consumption basket, in relation to services, which have reached the lowest price increases and are less than half the level that is taken into account in the Eurozone.

The decrease in the inflation rate in Romania in recent years can represent confusion at the national level. The main point of this confusion concerns the sustainability of aggregate demand. Within developed economies, in recent years, in the absence of an asset price bubble, aggregate demand has been at relatively low levels. However, the Romanian economy does not encounter this problem. The economies of the developed states have promoted unconventional policies in the form of quantitative easing, so as to increase the degree of employment. For this reason, they share the idea that, in the absence of sustainable final demand and, implicitly, a revitalization of economic activity, financial instability may occur. In the case of Romania, the BNR did not have to reduce the interest rate to a minimum level, nor apply unconventional policies. An example is represented by the fact that during the years 2015-2017, the government developed and implemented two important fiscal policy measures, namely the reduction of VAT, thus generating deflation in June 2015-December 2016 and subsequently, the increase of nominal salaries in the public sector. More precisely, from the value of 0.8% in 2015, from the perspective of the ESA definition, the budget deficit increased to approximately 3% during the years 2016-2017, the fiscal impulses in the previously mentioned years being plus 1.9%, respectively 1.1%. The two measures determined the considerable increase in the real wages of consumers and implicitly, the increase in aggregate demand. At the time, economists predicted that when output exceeded its potential level, this demand would cause an upward trend in inflation, which is calculated at constant taxes. However, the inflation rate was still below the lower limit of the band established by the NBR until April 2017. In addition to the restrictive policies applied in order to support a minimum level of the inflation rate, another explanation refers to imports and the prices applied in their framework. In other words, with a relatively stable exchange rate of the leu, and the wages of the population started to rise, many consumers purchased more imported products. For this reason, a considerable part of the additional demand generated by the fiscal stimulus was placed outside Romania, thus avoiding the strain on the domestic production capacity and, of course, the increase in inflation. Therefore, when there are constant taxes, inflation in Romania, in the last ten years, followed the inflation profile of imports of consumer goods, products, and services, but also its decreasing trend. More precisely, the inflation trend was in close correlation with the inflation of consumer goods imported from the Eurozone, taking into account that the member states of the European Union and those belonging to the Euro Zone constitute Romania's main commercial partners. However, many economists invoke the approach of developed states and claim that reducing inflation in the Romanian state implies a much greater reduction in the interest rate. However, the fiscal relaxation focused on the reduction of VAT in the period 2014-2017, as well as the permanent increase in budget allocations focused on current expenses, is viewed by economists as a measure adopted in real-time. This is due to the fact that fiscal relaxation stimulated economic growth, thus supporting the Romanian economy to grow at a higher rate compared to the potential one, thus creating a positive GDP

gap, which will provide Romania with an escape from the deflationary danger that is registered in the states developed.

Returning to the context of 2022, the gross domestic product increase is revised to 3.9%. However, for 2023, a decreasing value of 2.9% is forecast in line with slow growth prospects both globally and in the European Union. Investment and private consumption are seen as the main drivers of growth this year, while net exports are expected to act as a drag on GDP and lead to a gradual widening of the trade deficit. Looking ahead, indicators of economic activity and sentiment point to a less upbeat second quarter. For the rest of the forecast horizon, both positive and negative factors are intertwined. On the one hand, high inflation will affect the purchasing power of households. On the other hand, the optimistic outlook on the labor market and the support measures announced by the government in April, especially for vulnerable households, should keep private consumption growing, albeit more moderately. It is estimated that the dampening effect of high-interest rates and uncertainty on private investment will be more than offset by investment supported by European Union funds. Moreover, the prospects of war and blockades in other states of the world have generated a slowdown, which will therefore affect exports more than imports.

Steep and continued increases in food and energy prices pushed annual HICP inflation to 12.4% in May, lifting 12-month average inflation to 7.1%. Prices will continue to rise over the forecast horizon due to energy, as not all consumers are covered by the capping scheme and as numerous electricity and gas contracts will be renegotiated in the coming months. A price increase for this HICP component is expected in April 2023 as the capping scheme is due to expire. Food prices will also increase given global price trends and war shortages. Average annual HICP inflation is forecast at 11.1% in 2022 before slowing to 7.2% in 2023 as energy prices are set to moderate and core effects play out. Stronger-than-current wage growth represents an upside risk to the inflation forecast.

The National Bank of Romania claims that there will currently be an acceleration of the inflation rate to 9.6 percentage points at the end of the year, from the 8.5% value reached in January, with the potential to increase to a double-digit value. However, the rate is expected to return to the target band by the end of 2023. In 2022, the leu was little changed against the euro, thus remaining the most stable currency in the region since the start of the war in Ukraine. Moreover, it is estimated that the economy of the Romanian state will slow down considerably during this year, taking into account the geopolitical disturbances and the increase in the prices of utility bills that directly affect the citizens of the state and companies, while certain economists support the possibility of the emergence a technical recession in the first part of 2023.

5. Conclusions

The causes of inflation in the post-communist Romanian economy were related to the increase in salary costs that were not consistent with the increase in labor productivity, the depreciation of the national currency, the evolution of taxation, and the evolution of tariffs and prices of public utilities provided under monopoly conditions. In addition to all these things, the higher inflation in the Romanian

economy is due to the delay in the reform of the banking and the real sector, compared to other states in transition.

Also, following the analysis carried out, it can be seen how the inflation rate managed to decrease from the extremely high values, which were close to the hyperinflation threshold due to increases recorded over 50% (for example in the year 1993, the inflation rate was of 256.1%), up to a moderate percentage (inflation rate was 11.9% in 2004), eventually registering a downward trend. It should also be mentioned that the disinflationary process did not have continuity, because there were periods in which inflation increased suddenly (in 1996 it was 38.8%, and in 1997 it was 154.8%), and in the immediately following period it had a much lower level, i.e. in 1998, it recorded the value of 59.8%. However, even if this strategy has led to the creation of a process of disinflation, this result is far inferior to the results obtained by the other states, which have managed to have a single-digit inflation rate. Through the monetary policy in the first years of the transition, restrictive measures were applied, but also to allow the expansion of credit and the supply of currency in the Romanian economy. All these decisions led to increased inflationary pressures, which is why other objectives were pursued. Currently, the level of the inflation rate is high due to the negative effects caused by the outbreak of the Covid-19 pandemic and the uncertainty that arose with the outbreak of the war in Ukraine, which constitutes new macroeconomic challenges.

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TERRITORIAL MOBILITY OF THE ROMANIAN POPULATION. CAUSES AND EFFECTS

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Abstract: *For the first time in human history, more people are living in urban areas than in rural areas. Every year, millions of people decide to leave their rural homes and migrate to cities across the country or even across the border. Most of these people want to move to seek new job opportunities and, of course, to improve their lives, while others are forced to migrate because of sudden or slow-onset conflicts or natural disasters, such as rising sea levels, droughts and floods, which are often exacerbated by climate change and environmental stress. In addition, rural populations, whose livelihoods depend to a large extent on agriculture, are particularly vulnerable to pressures from migration. This article aims to provide an overview of rural-urban migration in Romania, detailing the causes and effects of this process. Romanian citizens from rural areas move to the country's big cities to enjoy the facilities offered by urban areas. In the current context, migration is the population's impulse from one topographical location to another, thus connecting temporary or permanent settlements. However, this process, like any other, brings with it both positive and negative economic, social and demographic consequences, which will be discussed in detail in this article.*

Keywords: *migration; history; economic; social; work;*

JEL Classification: *J11; J15; J18;*

1. Introduction

Today, most of the world's population lives in urban areas. More than 90% of urbanization has taken place in developing countries and is mainly concentrated among young adults aged 15 to 30. There are many reasons that influence people in making this decision, as cities offer a more promising location for social activities, much better medical facilities compared to rural environments and, most importantly, metropolises provide income, jobs and access to education for all. However, rapid urbanization is leading to progressive poverty, putting pressure on already strained public structures and services. For this reason, proactive and inclusive urban planning at the local level, as well as national mobility management policies, are fundamental to reducing the vulnerability of rural areas and harnessing the socio-economic potential of the migration process for the development of migrant citizens and host societies. In addition, migrant remittances can enhance rural food security while increasing economic and social investment in places of origin.

Internal migration is now one of the most important factors in reducing poverty rates and facilitating economic development. However, the internal factors affecting population mobility in Romania and the relationship between internal and economic migration are difficult to understand. This paper aims to provide an analysis of population mobility in Romania in order to understand the relationship between internal migration and economic development. This topic was chosen because it is essential to understand the link between internal migration and the economic development of the Romanian state in order to design appropriate policies to facilitate development, promote workers' rights, and prevent food shortages caused by the imbalance between urban and rural populations (Afsar, 2003; Satterthwaite et al. 2010).

In this context, the fundamental objective of this paper is to carry out an analysis of population mobility in Romania in order to understand the relationship between economic development and migration. Achieving this objective implies obtaining answers to the following questions:

- What is the evolution of the internal migration process in Romania?
- What are the characteristics of population mobility from rural to urban areas?

In the last part of the paper, the results obtained will be presented in detail, focusing on the questions presented above. The results section thus reveals the implications of the results as well as future research directions.

2. Specialty literature

Migration is the public's impulse to move from one topographical location to another alternative, thus linking temporary and permanent settlements. Internal migration is also recognized as an important mechanism by which the spatial distribution of people changes over time (Greenwood, 1997). The movement of people to different areas is a complex phenomenon involving both economic and demographic aspects. Empirically, migration studies can be classified according to their purpose, which is to find the determinants of migration or to study the consequences of migration.

Historically, people have always been on the move, and this is a particularly important means of economic and social development (McNeill, 1984). Over the past decade, the number of people moving within and across borders has steadily increased, outpacing global population growth rates (UN, 2017). Moreover, in 2017, there were 258 million international migrants globally, an increase of almost 70% since 1990 (UN, 2019). Migration theory has been at an impasse for decades (Arango 2000; de Haas 2010a). The field of migration studies has remained a surprisingly under-theorized area of social research. This is unfortunate because we cannot develop a richer understanding of migration processes unless we conceptually separate them from the broader processes of social change of which they are a part. Much migration thinking continues to rely, implicitly or explicitly, on simplistic push-pull models or neoclassical assumptions of individual income (or 'utility') maximization, despite their obvious inability to explain real-world migration patterns and processes. Although earlier theories of migration have rightly been criticized for their unrealistic assumptions, researchers have generally been better at disproving these theories than at finding viable theoretical alternatives.

Earlier contributions in the field such as Lee's (1966) migration theory, Mabogunje's (1970) migration systems theory, Zelinsky's (1971) mobility transition theory, Skeldon's (1990) work on migration transitions, Harris and Todaro's (1970) neoclassical migration theory, Piore's (1979) dual labor market theory, Stark's (1978, 1991) new economics of labor migration, and Massey's (1990) cumulative causality theory, have all attempted to come up with generalized understandings of migration. With the exception of a few authors (Carling 2002; Faist 2000; Hatton and Williamson 1998; Skeldon 1997), systematic theorizing of migration processes has been largely abandoned in recent decades (Skeldon 2012). In their overview of migration theories, Massey and his colleagues (Massey et al. 1993, p. 432) concluded that much migration thinking "remains mired in nineteenth-century concepts, models, and assumptions." Unfortunately, not much has changed since then compared to the current situation.

Over time, migration flows became more heterogeneous and complex, and by the end of the 20th century new conceptual frameworks had emerged. The new economic theory of labour migration (Stark and Bloom 1985; Stark 1991) derives from the neoclassical perspective and is its most refined version. The key feature of this approach is that it views migration as a family or household decision rather than an individual decision. According to this perspective, migration allows for diversification of household resources in the event of failure or risk to local sources of income. Thus, older relatives and those remaining in the home country can rely on remittances, thus ensuring the welfare of older cohorts, especially in developing countries. While the new economic theory of labour migration incorporates consequences for countries of origin, the dual labour market theory (Piore 1979) focuses on destination countries. This approach also moves from the micro-level perspective of previous economic theories to a macro-level explanation of the structural factors that determine migration. Piore's approach asserts that the constant demand for labour for foreign workers is an intrinsic feature of labour markets in modern industrial societies. Other important studies not explicitly mentioned in this section can be found in the references.

3. Research Methodology

The paper entitled "Territorial mobility of the Romanian population. Causes and effects" is based on a mixed research methodology, as it combines both the descriptive analysis method used to introduce the current state of knowledge and the dynamic macroeconomic analysis to identify the evolution of the migration process in Romania. In addition, this paper investigates the link between migration and economic development. The main data sources used are taken from the websites of Eurostat, the National Statistical Institute and the International Organisation for Migration, as well as the European Commission.

Finally, the results of the research are presented in tabular and graphical representations, and the theoretical information underlying the scientific approach was extracted from economic and social papers and articles, books and studies both nationally and internationally relevant to the field of research.

4. Case Study

Over the last two decades, the process of territorial mobility in Romania has become increasingly complex and interesting. The first specific feature of this phenomenon is the gradual change in migration rates. The beginning of the 1990s was an important period in which a significant number of citizens changed their residence as a result of the fall of the communist regime and the changes that followed. It should be noted that this peak was known in the literature as a reaction to the mobility policies of the communist regime, given that internal mobility prior to the 1990s period was very low. Moreover, in the 1960s and 1970s, the communist regime promoted urbanisation, and in the 1980s temporary mobility was encouraged, which involved commuting rural populations to urban areas close to home or temporarily relocating labour for major infrastructure investments. In the last decade of the communist period, very strict and dramatic controls were imposed on change of residence, either by limiting access to certain urban centres or by restricting the mobility of certain operational groups. The institution of labour allocation for university graduates is one example, where the state made its point by forcing young intellectuals to take up jobs in certain areas and, of course, for a considerable period of time. When they refused to do so, their profession became much more limited and they suffered as a result. It should be noted that a large number of jobs have been administratively relocated in a decentralised manner, preventing people's freedom to pursue their preferences as to where they live. Consequently, after the collapse of the communist regime, these relocations materialised in a high rate of internal migration, when about 3.4% of the population changed residence.

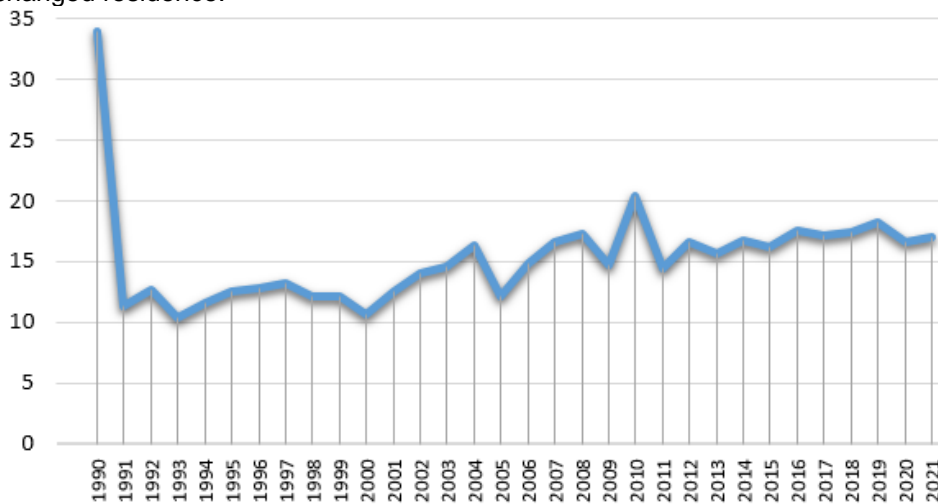


Figure 2: Internal mobility in Romania 1990-2021 (rates per 1000 inhabitants)
Source: Authors' processing based on data from the website of the National Institute of Statistics (INS)

In analyzing internal mobility in Romania, it is also important to take into account the economic and social transformations of the period under analysis, such as industrial decline, rising unemployment, the emergence of crises, economic

restructuring, legislative changes, etc. In this respect, there was a considerable increase in internal mobility (calculated as a rate per 1,000 inhabitants) from 8.6% in 1985 to 33.9% in 1990 and then gradually reduced to 10.7% in 2000. Since 2001, there has been an upward trend in internal mobility, often exceeding 16% in good economic times, while during the economic downturn there has been a significant reduction from 17.3% in 2008 to 14.7% in 2009. It is worth noting that before the outbreak of the Covid-19 pandemic, internal mobility in Romania was 18.2% in 2019, which fell to 17% in 2021 due to the effects of the pandemic and the measures taken.

Table no.1: Internal mobility in Romania 1990-2021

1990	33,9	2001	12,5	2012	16,6
1991	11,3	2002	14,1	2013	15,7
1992	12,7	2003	14,6	2014	16,7
1993	10,4	2004	16,3	2015	16,2
1994	11,6	2005	12,1	2016	17,5
1995	12,6	2006	14,8	2017	17,1
1996	12,8	2007	16,6	2018	17,4
1997	13,2	2008	17,3	2019	18,2
1998	12,1	2009	14,7	2020	16,6
1999	12,1	2010	20,4	2021	17
2000	10,7	2011	14,5		

For the analysis of territorial labor mobility, a central role is played by the flow from rural to urban as well as from urban to rural areas. Thus, in line with the graph below, we can state that during the period analyzed, especially after 1995, the rate per 1000 inhabitants of people who decided to change their residence from urban to rural is significantly higher than those who decided to move to urban areas.

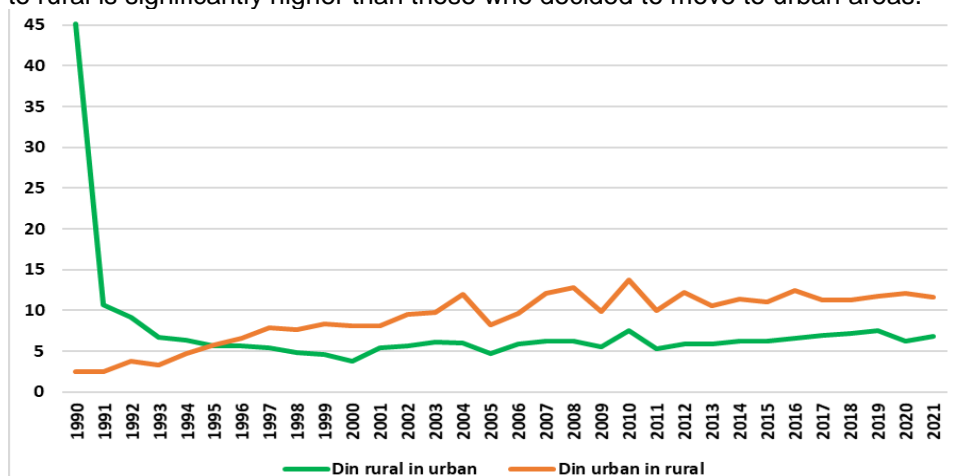


Figure 2: Structure of internal migration flows (rates per 1000 inhabitants)

Source: Authors' processing based on data from the website of the National Institute of Statistics (INS)

The explosion of people who decided to move from rural to urban areas in 1990 was due to the fact that immigration was controlled by the communist regime until 1989, and after its change it was decided to lift restrictions and increase the desire of people to move from rural to urban areas. At the same time, economic and political-administrative factors played a key role at the beginning of the period under analysis. Economic restructuring decisions, especially in industry, loss and insecurity of jobs, lack of funds and difficulty in buying housing, and the high cost of living in the city led more and more people to relocate to the countryside, as can be seen from the graphical representation opposite. So they decided to move to the countryside, where daily life was more affordable and they could farm, but for most people it was just subsistence farming. Another important factor that led people to choose the countryside was the adoption of the Land Law in 1991, which meant that many urban dwellers became landowners in rural areas.

5. Conclusions

Migration, like any other economic and social process, is influenced by a multitude of economic, political, demographic and social factors, which are associated with the migrant's state or city of origin, which are known in the literature as push factors, or with the state or city of destination, which is a pull factor. Internal mobility will continue to be a reality as long as there are disparities in well-being and development between different regions globally.

The demographic dynamics of the last decade confirm that Romania's population has declined considerably and that territories outside urban polarisation areas have experienced major demographic changes, whether resulting mainly from a negative natural increase, which has been marked by an increase in mortality at the same time as a decrease in birth rates.

It has also been found that younger people tend to move to urban areas and people over 35 tend to move to rural areas, while women tend to move more often than men. This, together with increased mobility to developed regions, poses a major challenge to economic development. In this respect, it is necessary for policy makers to take into account the current demographic crisis and to identify and promote public policies that improve migration and, by extension, demography, because if these problems are not solved or improved, it will put major pressure on future public finances. Thus, one solution to improving internal mobility to less attractive areas could be to provide quality jobs, easy access to housing, develop infrastructure, provide quality public services, support families and encourage birth rates and labour market re-entry by creating programmes to improve work-family realities. All these measures can contribute significantly to demographic growth and to the improvement of the economic and social situation of the Romanian economy, through the development of all regions.

Finally, but importantly, the analysis of this phenomenon is a broad one and this is one of the reasons why it is still too early to say whether the urban exodus has started, but rather it is the expansion of cities to the surrounding rural areas. In addition, the economic context of recent years, strongly influenced by the outbreak of the health crisis, has slowed migration to cities. In this respect, policy makers, through fiscal policy measures on taxes and charges, but also through budgetary allocations for infrastructure development in urban areas, have an important role to play in reducing disparities and balancing the territorial mobility of the population.

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PREVENTION SAVES LIVES AND REDUCES HEALTH SPENDING

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Abstract: *Maintaining a health system, at the highest level of performance and ensuring the health needs for the population, is a major challenge for all states. Health expenditures are constantly increasing, being influenced by technological progress in the field, innovative treatments or aging of the population in correlation with the existence of chronic diseases related to age. An important component in reducing health expenditure is prevention, medical conditions can be detected in the early stage, and their treatment requiring significantly lower costs compared to aggravated forms of the disease. For the period 2014 - 2018, Romania has allocated, on average, over 68% fewer financial allocations for prevention (out of GDP), compared to the European Union average, while countries such as Italy, Finland, Sweden, Germany and the Netherlands have allocations between 27 and 36% above the European average. Romania ranks, at European Union level, on the penultimate position, allocating 0.08% of GDP (2018) for prevention in health, with a direct impact on the number of critical patients and high treatment costs.*

Key words: prevention in health; health spending; cost reduction through prevention

JEL classification: A12; H51; i15; i18; P43

1. Introduction

Prevention in health means complex and combined actions, with the main aim of reducing avoidable diseases, which cannot be achieved only through simple information campaigns, it being necessary to carry out dedicated screening and medical education actions at the population level.

At the level of the European Union, a majority of the recorded deaths are caused by three main diseases that include the circulatory, respiratory system and neoplasms, for 2018, representing a rate of 26,039 deaths per 100,000 inhabitants out of the total of over 35,000 deaths recorded. (Eurostat, 2022).

Through this research I want to show the importance of prevention in health from at least two extremely important aspects: saving lives and ensuring years of quality life, as well as the impact on health expenses.

This study was carried out by analyzing open databases, from the European Union level, as well as public reports regarding the national health programs carried out in Romania, a comparison being made that shows the low level of importance shown to prevention.

2. Literature review

Even though Benjamin Franklin's words: "*An ounce of prevention is worth a pound of cure*" (Labaree, 1961), referred to fire prevention, are perfectly applicable in any field, including that of health. Prevention in health means, in addition to maintaining proper health and lowering the mortality rate, a significant reduction in health spending.

Various authors have conducted research on reducing costs in health through actions to eliminate fatal diseases (Bonneux L, 1998), reducing the demand for medical services (Fries, 1993), trying to answer whether prevention saves lives or just reduces costs (Grootjans-van Kampen I, 2014). The European Commission is trying to promote prevention strategies to improve health (Sauer, 2010), in 1993 a multiannual public health programme was established by publishing eight areas of action on health prevention and monitoring. (Bsoul-Kopowska, 2019).

3. Analysis of prevention spending in the European Union

By analysing the data (Eurostat, 2022), it is found that the average percentage of GDP expenditure allocated for health prevention for the period 2014-2018 is 0.21%, with countries such as Italy, Germany, Finland, Sweden and the Netherlands allocating above the EU average, with percentages (on average) between 0.36 and 0.38% of GDP.

At the opposite pole are Luxembourg, Malta, Greece, Cyprus, Romania, and Slovakia, which allocated percentages between 0.08 and 0.11% of GDP for health prevention in the same period.

For 2018, Romania ranks on the penultimate position, among 26 Member States of the European Union, with a budget allocation of only 0.08% of GDP, ahead of Slovakia (0.05%).

Table 1: Situation regarding prevention spending in the EU, percentage of GDP

Country	2014	2015	2016	2017	2018
Italy	0,38	0,37	0,37	0,38	0,41
Germany	0,36	0,36	0,36	0,36	0,37
Finland	0,32	0,37	0,37	0,36	0,37
Sweden	0,33	0,34	0,34	0,35	0,37
Netherlands	0,40	0,36	0,36	0,34	0,32
Slovenia	0,26	0,24	0,25	0,25	0,26
Estonia	0,19	0,20	0,21	0,22	0,24
Denmark	0,22	0,23	0,24	0,24	0,23
Czechia	0,24	0,20	0,21	0,22	0,22
Austria	0,22	0,23	0,22	0,22	0,22
Bulgaria	0,22	0,21	0,21	0,21	0,21
France	0,22	0,21	0,21	0,21	0,21
Croatia	0,19	0,20	0,21	0,21	0,21
Iceland	0,20	0,19	0,20	0,20	0,21
Hungary	0,19	0,19	0,22	0,20	0,20

Spain	0,19	0,19	0,19	0,19	0,19
Ireland	0,26	0,20	0,20	0,19	0,18
Belgium	0,19	0,18	0,16	0,16	0,17
Portugal	0,17	0,17	0,17	0,17	0,17
Latvia	0,11	0,11	0,15	0,14	0,16
Lithuania	0,11	0,13	0,14	0,14	0,15
Poland	0,17	0,17	0,20	0,16	0,14
Luxembourg	0,11	0,11	0,11	0,11	0,11
Malta	0,15	0,12	0,11	0,11	0,11
Greece	0,12	0,11	0,11	0,10	0,10
Cyprus	0,04	0,09	0,09	0,09	0,09
Romania	0,09	0,10	0,08	0,09	0,08
Slovakia	0,13	0,14	0,08	0,07	0,05

Source: Eurostat, <https://ec.europa.eu/eurostat/databrowser/bookmark/db92632b-795b-41dd-a6ac-f450c286ce7a?lang=en>

4. Screening, a basic component in prevention

Screening is the most important activity in health prevention, allowing the early detection of cases of disease, diseases detected in the early stage having a high chance of becoming treatable. The costs of treating the conditions detected at an early stage are significantly lower than those detected in an advanced phase where advanced medical procedures or specific state-of-the-art treatments are often required.

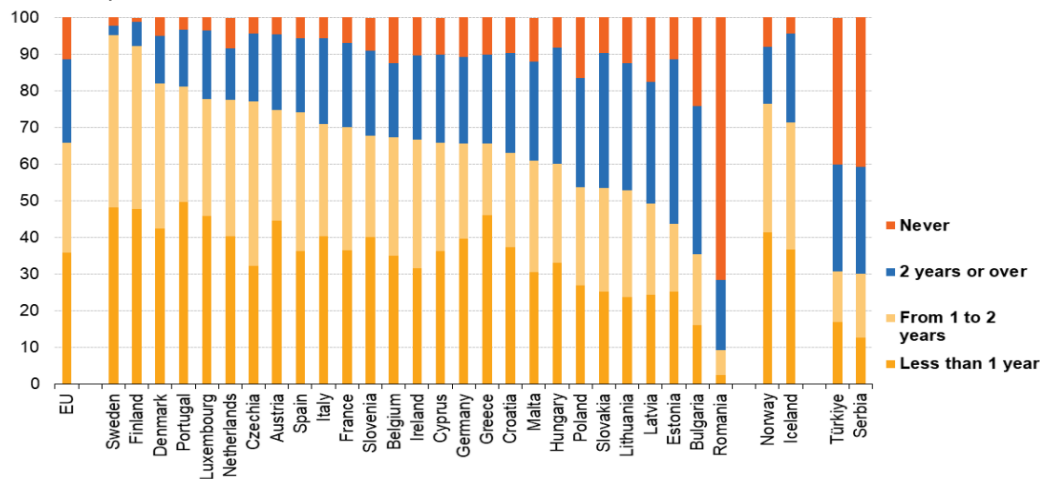


Figure 1: Self-reported screening – proportion of women aged 50 to 69 years having had an X-ray breast examination, 2019 (%)

Source: Eurostat (hlth_ehis_pa7e)

At European Union level, a series of screening programs are being implemented for breast cancer, cervical cancer, colorectal cancer, influenza vaccination or cardiovascular disease screening. Some countries have realized the high

importance of these programs and have made efforts in their development, so that as many citizens as possible benefit from these services, with a direct impact on the health status at the level of the population, reducing the pressure on the medical system and implicitly the funds allocated to the treatment of diseases. For Romania, compared to other Member States of the European Union, screening represents another failed objective in the field of health, which is confirmed by the statistical data provided by Eurostat.

Countries such as Sweden, Finland, Denmark, Portugal, Luxembourg, the Czech Republic and Austria have, in 2019, less than 5% of women between 50 and 69 years of age who have never taken a breast X-ray.

Romania is at the bottom of the ranking with a worrying percentage, respectively 71.6% of women in this age segment have never performed a breast X-ray.

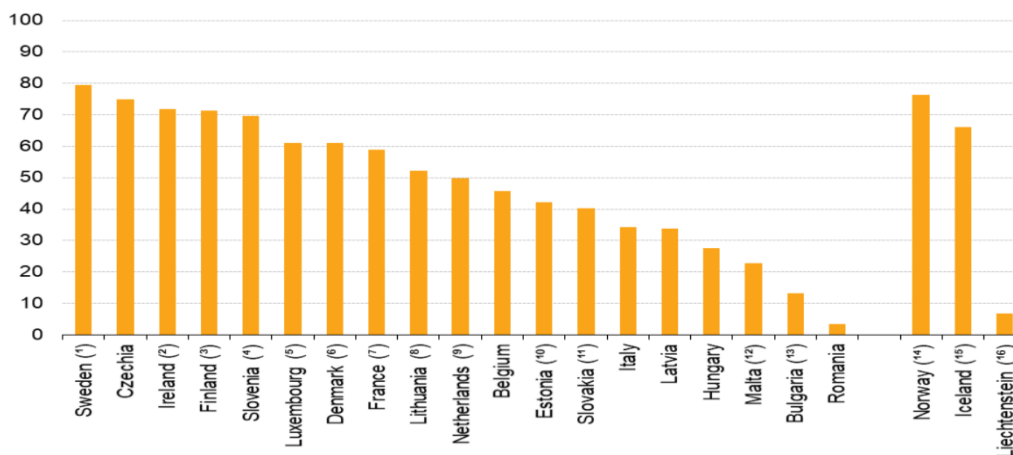


Figure 2: Cervical cancer screening rate, women aged 20-69 years, 2020 (%)
Source: Eurostat (hlth_ps_scre)

In Sweden, the Czech Republic, Ireland and Finland, women aged between 20 and 69 years performed more than 70% cervical cancer screening in 2020. In this chapter, too, Romania occupies the last place with a percentage of only 3.4%, given that the highest incidences in the European Union are recorded, being diagnosed 3,380 new cases and 1,805 deaths (in 2020) caused by this disease. (Bruni L, 2021)

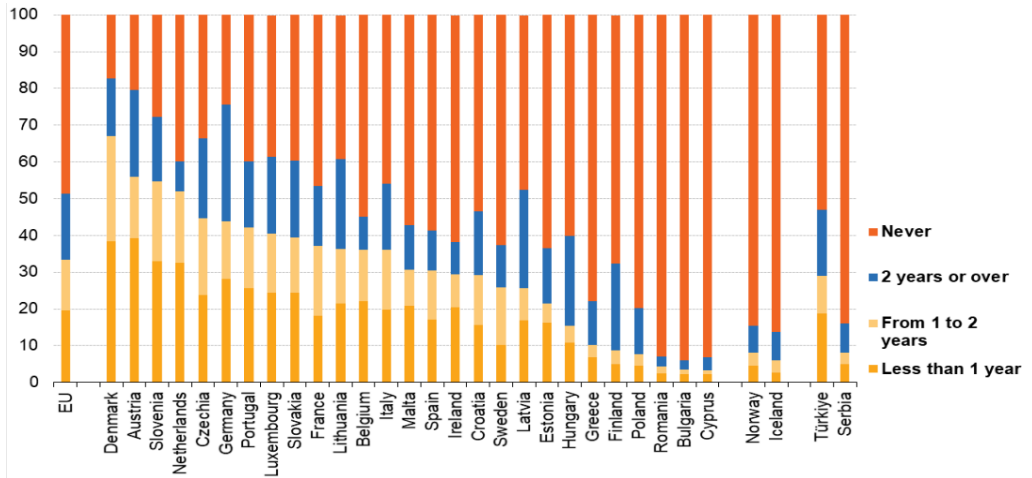


Figure 3: Colorectal cancer screening rate, people aged 50-74 years, 2019 (%)
Source: Eurostat (hlth_ehis_pa5e)

Over 90% of the population aged 50-74 years, in Romania, Bulgaria and Cyprus, have never performed a screening for colorectal cancer, at a great distance from countries such as Denmark, Austria, Slovenia or Germany (between 17.4% - 24.5%).

In terms of vaccination against influenza, Romania ranks almost half of the European Union average, in the population segment over 65 years, with a percentage of 35% (in 2019) and half compared to Denmark, Greece or the Netherlands.

Vaccination is the most effective form of protection against diseases, the cost of vaccination being extremely low in relation to the expenses required to treat the conditions. Through vaccination, over time, a number of diseases that could be fatal were eradicated or provided the necessary immunization so that the conditions did not become serious.

Table 2: Comparative situation regarding vaccination and hospitalisation costs

Vaccination Cost	Hospitalization Cost	COVID-19 Treatment Cost
Anti HPV – 157 €	Oncology – 363 €/day	ATI – 900 €/day
Influenza – 6 €	Infectious – 119 €/day	Infectious – 360 €/day
Anti COVID-19 - €	Cardiology – 117 €/day	

Source: Author processing based on costs in hospital units

The costs of vaccination against HPV, against cervical cancer are almost half compared to a single day of hospitalization in an oncological ward. The costs of only the drug treatment of patients with oncological conditions amount to €2,400/year per patient (CNAS, 2022), not including the rest of the expenses for hospitalization, surgery or out-of-pocket payments made by patients.

Vaccination against COVID-19 is one of the most cost-effective health protection solutions, the risk of an extremely unfavorable evolution of this infection being very high, and the expenses necessary for the treatment can exceed up to 47 times the cost of vaccination.

5. Analysis of the main causes of death in the European Union

Following the analysis of the data provided by (Eurostat, 2022), for 26 Member States of the European Union, in 2018, 75.87% of the causes of death were caused by three major groups of diseases, namely diseases of the circulatory, respiratory and neoplasm systems. Of the total number of deaths recorded in 2018, 43.09% of deaths are caused by diseases of the circulatory system, 25.11% by neoplasms and 7.67% by respiratory diseases.

Romania recorded, in 2018, the penultimate position, with a total rate of 1,474 deaths reported per 100,000 inhabitants, 59.26% of which were caused by diseases of the circulatory system, 18.65% by neoplasms and 6.42% by diseases of the respiratory system.

The average rate at European Union level of deaths reported per 100,000 inhabitants is 810 cases, Romania registering a rate with over 660 cases / 100,000 inhabitants in addition to this average.

Table 3: Situation of the main causes of death in the EU, 2018, rate per 100,000 inhabitants

Country	Diseases of the circulatory system	Cancer	Diseases of the respiratory system
Spain	227,7	229,96	101,04
Luxembourg	262,3	237,24	85,31
Finland	329,33	218,71	38,41
Belgium	237,33	243,62	111,66
Italy	281,04	247,18	66,00
Sweden	296,3	230,91	68,16
Cyprus	292,68	212,28	91,88
Netherlands	246,52	281,76	90,62
Denmark	235,66	287,02	127,64
Malta	311,22	240,07	100,16
Portugal	286,87	248,48	116,58
Ireland	277,91	269,5	125,41
Greece	337,69	246,2	94,73
Austria	376,95	242,5	64,01
Germany	373,57	254,73	76,84
Slovenia	403,38	312,16	53,93
Czechia	556,76	278,03	89,6
Poland	526,11	314,87	84,85

Estonia	605,73	300,8	48,52
Slovakia	597,08	313,33	86,96
Croatia	609,43	330,61	59,11
Lithuania	782,16	278,78	48,14
Latvia	818,15	300,86	46,59
Hungary	738,71	342,86	87,83
Romania	873,5	274,85	94,59
Bulgaria	1.075,92	233,81	70,84

Source: Author processing from Eurostat database, [hlth_cd_asdr2]

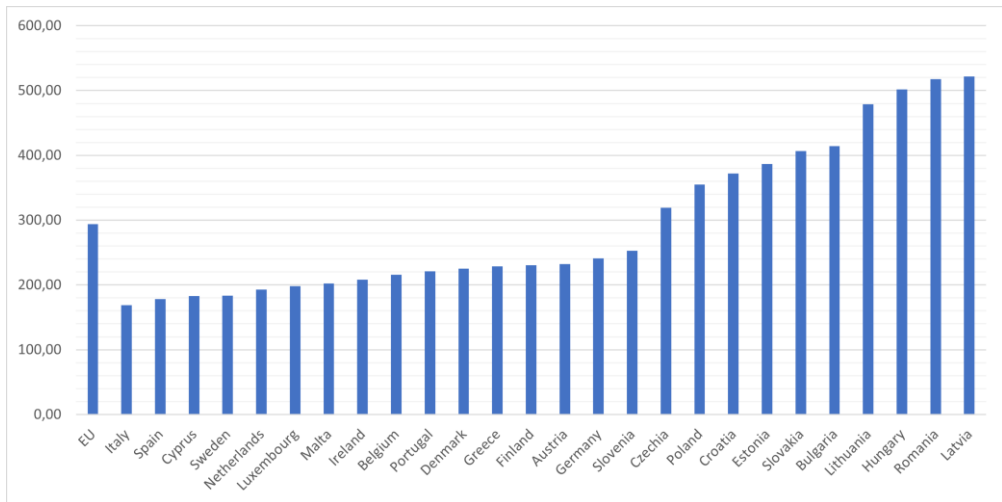


Figure 4: Avoidable deaths, reported per 100,000 inhabitants, 2018 Source: Eurostat,

https://ec.europa.eu/eurostat/databrowser/view/hlth_cd_apr/default/table?lang=en

The European average for avoidable deaths in 2018 is 293.61 cases per 100,000 inhabitants, and ten countries exceed this average. Romania is on the penultimate position registering almost double the European average, respectively 517.47 cases per 100,000 inhabitants.

Among the avoidable deaths are those caused by alcohol consumption, another chapter in which Romania ranks among the first positions in the European Union statistics and for which there are no national prevention programs.

6. Conclusions

Health expenditure in Romania is among the lowest in the European Union, with a direct impact in terms of mortality rates from preventable causes, both in terms of disease prevention and treatable cases.

High mortality rates on treatable causes show us that the Romanian health system fails to provide the population with the necessary and timely treatments to avoid deaths.

The present paper carries out an empirical research on the existence of a correlation, at the level of the 26 EU Member States analyzed, between the funds allocated for prevention, respectively the promotion of health, and the mortality rates caused by the three major groups of diseases, diseases of the circulatory, respiratory and neoplasm systems, with direct implications in reducing health expenditure.

Given the complexity of the factors influencing changes in people's lifestyles, the mere allocation of financial resources for prevention in health does not guarantee noticeable results in avoiding unwanted deaths. Dedicated and intense actions are needed in order to educate the population about adopting a healthy lifestyle with a direct impact on the state of health.

In order to establish the impact of prevention on the causes of death, in-depth analyses are also required on other causes that can cause the population to become ill, namely smoking (8 million people die annually from smoking (WHO, Fact sheets - Tobacco, 2022)), pollution, unhealthy diet or alcohol consumption (3 million people die annually due to alcohol consumption (WHO, Fact sheets - Alcohol, 2022)).

Most of the time, in Romania, prevention is reduced to press campaigns, the transmission of communications or the distribution of printed materials, some campaigns failing due to the lack of a communication strategy (see the anti-HPV campaign), with a direct impact on the health of the population.

Even though statistics at European Union level show worrying trends in preventable deaths and life expectancy, Romania fails to implement and effectively run dedicated prevention programs.

Although in recent years the screening activities in Romania register certain increases, compared to other Member States of the European Union, they are in an insignificant percentage, the detection of diseases in its early stage being reduced, which has a substantial impact on the allocated funds necessary to treat critical cases.

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MIGRATION OF MEDICAL PROFESSIONALS IN HUNGARIAN HEALTHCARE SECTOR - LITERATURE REVIEW

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Abstract: *Medical migration is a global phenomenon, an important challenge of globalization and the current global economic trend, which plays a critical role in the operation and maintenance of healthcare systems. This applies to Hungary as well, the migration of health professionals has been a problem that has seriously threatened the Hungarian healthcare system for at least 20 years. In my research, I conducted an integrative literature review of 8 scientific articles about the migration of Hungarian healthcare professionals published in the last 5 years (2018-2022), which I found in the PubMed and ScienceDirect publication databases. The aim of my review study is to provide a complete and satisfactory summary of the literature examining and analyzing the current migration trend in Hungarian healthcare, as this way, even with the lack of the official statistical data, we can gain insight into the current situation. Examining the profile of migration, it can be seen that the situation is most critical in the professions of internal medicine, family medicine, and infant and pediatric medicine in terms of medical specialization, while and in terms of country provision and demographics, there is the most prominent shortage of specialists in Békés, Nógrád, Jász-Nagykun-Szolnok, Tolna and Szabolcs-Szatmár-Bereg counties compared to other counties. The labor crisis in Hungarian primary healthcare is gradually escalating and also within ten years, Hungary will face a severe shortage of pediatricians. Optimizing the working conditions of healthcare workers is a political and social interest, which would probably take a long time, but could ensure high-quality care in the long run. One of the most important conclusions of the review is that Hungarian healthcare workers abroad left primarily because of better quality of life and more favorable financial conditions, but some of the research results showed, that changes in these conditions at home would encourage them to return home.*

Keywords: Medical migration; Health professionals; Workforce; Physicians; Healthcare system; Hungarian healthcare

JEL Classification: O15, I19, J45, J29

1. Introduction

Medical migration is a global phenomenon, an important challenge of globalization and the current global economic trend, which plays a critical role in the operation and maintenance of healthcare systems and is receiving increased attention

worldwide. The medical profession is among the most mobile of highly skilled professions, particularly in Europe and also the sector, which experiences the most serious labour shortages (Becker et al, 2020). Economic-migration and career changing have become more common issues among healthcare practitioners and the past two decades have been marked by significant growth in the migration of medical doctors. Lower unemployment rate, good remuneration of physicians, an aging population, and good medical infrastructure in the host country are the main contributors to physicians' brain drain (Botezat et al, 2020). In the past few years In Europe, the creation of a border-free labor market and its expansion with the EU enlargements of 2004, 2007, and 2013 endowed health professionals with the right to provide services and to relocate to another EU Member State (Suciu et al, 2017). Also Hungary is struggling with a shortage of human resources caused by medical migration, especially after joining the EU in 2004. The most important objective of my research is review of literary sources on the phenomenon of medical migration in Hungary, which might thus provide us with new insights as well as highlight some conceptual contributions.

2. Literature review

Many scientific publications discuss healthcare workforce migration on international level. This is an important global phenomenon, which results in a shortage of health personnel across the world. Bludau highlighted (Bludau, 2021), that poor countries are generally concerned about medical "brain drain." According to Asadi (Asadi et al, 2018), identifying the factors which could influence the migration of health human resources is the first important step in prevention of this trend. Despite a lot of difficulties connected to the migration, e.g. language barriers which can complicate care delivery and increase stress and workload (Gerchow et al, 2021), there is still considerable number of healthcare professionals on global level, which wish and make efforts to go to work in developed countries. Discussing the migration decisions of African health workers, Blacklock concluded (Blacklock et al, 2014), that there is a complex interaction of contributing factors, first of all unmet material expectations, followed by interpersonal disagreement, insecurity in workplace, fear from threats to safety (in/out of workplace), lack of adequate professional support, development and respect, as well as the conviction that all the hopes will be fulfilled abroad. This broad range of factors influencing the migration, could be also applicable for other developing or least developed countries. It is important to collect reliable data on migration and flow of healthcare workers in order to get decisive picture of migration patterns. However, the available information on international level is still insufficient and very poor quality (Mills et al, 2011) due to inadequate registration of migration data in both receiving and sending countries, different and complex pathways of migration and status of migrating healthcare workers (e.g. permanent or temporary migration) (Aluttis et al, 2014). Aluttis and his research team also concluded, that due to globalization, the health workers worldwide are connected, mobile and aware of the opportunities in

other, developed countries, which leads to the global increase of medical professionals migration. The shortage of healthcare workers is shifted from high income countries to low and middle income countries, which are unable to influence or prevent the factors leading to migration and subsequent brain drain. This also emphasizes other important problems, the facts that high income countries suffer from the chronic undersupply of health workers and that their healthcare systems are unsustainable, relying on immigration and foreign labor. In Aluttis's research it has been highlighted, that the recruitment of health workers from foreign countries does not solve the problem, but creates potentially dangerous, even life-threatening situations in developing or least developed countries.

It is also important to make difference between foreign-born and foreign-trained health professionals. In the evaluation of migration are more relevant foreign-trained healthcare workers, while in the group of foreign-born, there could be medical professionals who just born abroad but got their diplomas in the developed countries, where they currently work as well. According to the OECD data, the percentage of foreign-trained doctors in European countries in 2021 was the highest in United Kingdom (31,89%), Ireland (40,45%), Norway (42,1%) and Israel (57,82%), while in Hungary in 2020 it was 8,18%.

3. Methodology

As already mentioned, in my research I have used the literature review method to examine articles on the migration of Hungarian healthcare professionals published in the last 5 years (2018-2022) and included in the PubMed and ScienceDirect publication databases. I focused on domestic studies that examined various aspects of medical migration, as well as opinions and experiences related to it. A literature review is a comprehensive, thorough overview of the current state of knowledge on a given topic, as well as discussion of the literature surrounding a certain topic. In order to identify gaps in the current knowledge and to make recommendations for future research, it must be critically evaluated and synthesized. This integrative type of the review is an important tool, which evaluates the strengths and weaknesses of the existing research and can be also used to inform decision-making in clinical practice or policymaking. As first step, it is certainly important to decide, which articles relevant to the topic should be included in the research. As in my review I tended to deal with migration among Hungarian healthcare workers, I have focused on studies that examined health professionals' views and experiences on migration. Eight (8) studies were included in this research area.

4. Results

Gyórfy and Szél have done research about Hungarian medical students' intentions to work abroad after finishing their studies (Gyórfy et al, 2018b). In 2016/2017

academic year they did a quantitative and qualitative online survey of 530 students from 4 Hungarian medical universities (University of Budapest, Debrecen, Pécs and Szeged), but analyzed only the 5th (51.3%) and 6th (48.7%) year students' answers, 165 in total (38.5% male and 61.5% female). The majority of respondents were students of the Semmelweis University in Budapest (41.4%), followed by the respondents from the University of Szeged (28.4%), and finally the students from Debrecen (19.1%) and Pécs (11.1%). Although the students which answers were analyzed in this survey represented only 2,75% of the complete medical students population (5984) in that particular academic year, the evaluation showed, that more than 40% of students imagine their future abroad. Most of them would leave immediately after graduating from university and plan to work abroad for at least two to five years. At the same time, half of the medical students who declared, that they want to go abroad are not sure about returning home. The most decisive motivations for looking for employment opportunities abroad are the currently prevailing working conditions in Hungarian healthcare system, inadequate wages, as well as the general living conditions in Hungary. It is important to emphasize that these data only reflect the desires and intentions, as the number of students who have a specific agreement with a foreign institution is negligible. There are subjective and objective conditions, which would support staying abroad or returning. Among the subjective reasons, family motivations are primary, however, homesickness, patriotism, the lack of Hungarian words/landscapes/food can also be decisive in returning. The objective reasons are clearly related to work environment factors: the young generation who wants to say no to gratuities (seeing the difficult situation of their older colleagues), unpredictable incomes, long working hours, and risky infrastructural conditions. Work-life balance and a supportive collegial atmosphere seem important to future medical doctors. From the study results we can also notice, that the examined population of medical students is strongly feminized. Similar data are presented by the Hungarian Central Statistical Office, that the proportion of female doctors in the young age group (26–29 years) is twice that of male doctors.

Gyórfy and her team also investigated the connection between the Hungarian physicians' willingness to migrate and burnout, as the most important challenges of the twenty-first century healthcare (Gyórfy et al, 2018a). In 2013 they did a quantitative, online survey including 4 784 Hungarian physicians, which represented 12% of the total physician population in the same year (based on the data published by the Central Statistical Office). They survey was done using the contacts of the registered members of the Hungarian Medical Chamber and the association between physicians' burnout and their willingness to migrate was determined by binary logistic regression analysis. 82% of the respondents did not plan to work abroad in the upcoming one or 2 years, while 16.6% planned to work as physician and 1.4% not as physician. Among those who plan to work abroad, 17.1% had written or oral contract and 32.9% who planned migration in the near future but had not taken any measures yet. The results showed, that there is a circular causality between burnout and the willingness to migrate. The intention to work abroad was affected by the emotional exhaustion dimension of burnout, depersonalization had

a tendency to impact the willingness to migrate, while contemplating migration might evoke a certain degree of depersonalization in caregivers who are in a dilemma.

Gaal and his research team (Gaal et al, 2021) state, that Hungary is facing human resource shortages brought on by emigration, especially after the EU accession in 2004. The financing restrictions on public provision were aggravated by the loss of thousands of health workers, who emigrated mainly to Germany, the UK and Austria, but, to some extent, also to the private sector within the country. The final push came from the COVID-19 pandemic, which threatened to put the whole system to its ultimate test. They highlighted that the deteriorating conditions in the public sector and the migration-driven human resource crisis have generated growing dissatisfaction among health workers, which have from time-to-time erupted (e.g. spontaneous and organized protests, resignations of heads of departments, groups of doctors quitting their jobs in a particular hospital) (Gaal et al, 2020). These events provided munition for professional chambers, trade unions and other organized interest groups to lobby for improvements, mainly for pay increases. For instance, in August 2020, the newly elected leaders of the Hungarian Medical Chamber invited members to deposit their written and signed cancellation of voluntary overtime to exert pressure on the government and acknowledge that without this, health services would not be able to function. The Act, passed on 6 October 2020, brings the employment of health workers under strict central control with a new employment status similar to that of the armed forces. The Act also provides physicians with an unprecedented 120% salary increase and criminalizes informal payments. Gaal emphasized, that the reception has been overwhelmingly negative, however the first statistics show that only about 3-5% of the active workforce did not sign the contract by 1 March 2021. The implementation of the reform still faces serious challenges and the government eventually responded to the demands by offering additional funding to certain areas and pay raises to various groups of health workers. As conclusion of this research is, they accented, that neither the theory nor the empirical evidence suggest the policy will work in practice. The key of success would be proper understanding and addressing the motivation of both the health professionals and the patients in term of informal payment. Low wages are an important factor why doctors accept informal payment, while patients make those in order to access priority in healthcare system, to ensure adequate medical care. According to Gaal, it can be argued that the pay raise might induce the repatriation of health professionals working abroad, but the accompanying conditions of redeployment and transfer of health workforce by the government may reduce the attractiveness of higher salaries.

Kovács and her team did a research is to examine the consequences of migration of healthcare professionals from Hungary to foreign countries (Kovács et al, 2019). They used the data of the Monitoring System of Human Resources in Healthcare System managed by the General Directorate of Human Resources Development (ÁEEK EFF) of the State Healthcare Center and selected the data of the five medical specialties most affected by the migration of physicians, generated during

a six-year cycle (2010–2016). In this research, they measured the density of physicians as well as doctors' specializations (professional exams) with valid registration status. They have observed, that in Hungary the number of physicians involved in migration compared to the number of those with valid licenses in the five most affected specialties was the highest in anesthesiology and intensive therapy (23.5%), in surgery (17.9%), followed by internal medicine (7.9%), infant and pediatric medicine (7.4%) and family medicine (6.4%). According to their results, these specialists are mainly from the 50+ age group, so it is worthwhile and necessary to emphasize the training and retention of the appropriate supply. They concluded, that in the examined specialties, the aging workforce and the low supply of specialists are typical in the regions with a more disadvantaged situation. The results of the research emphasize the problem of aging, as well as regional discrepancies in the case of specialized fields at risk of outflow. It can be seen that a significant majority of the workers in the professions of internal medicine, family medicine, and infant and pediatric medicine belong to the older age group, over 50 years old. The analysis carried out by specialty showed that the most critical situation can be seen in the case of infant and pediatric specialists. More than 70% of pediatric and pediatric specialists are 50 years or older, while in family medicine they represent 68%, in surgery approximately two thirds and internal medicine 65.5% of the total number of all age groups. Only in anesthesiology and intensive care more than half of the working doctors are younger than 50 years old. The data also pointed out that there are marked regional inequalities in terms of care: the capital region and medical university towns and counties are the least affected and in the best position in terms of specialist medical supply. In the capital, the number of doctors is significantly higher due to the top role of progressive care and the institutions related to medical training, and the relatively good situation of Baranya, Csongrád and Hajdú-Bihar can also be linked to the university. It can be concluded that the shortage of specialists in the selected five specialties is severe in the counties of Békés, Nógrád, Jász-Nagykun-Szolnok, Tolna and Szabolcs-Szatmár-Bereg compared to the other counties.

Papp and his research team explored the development of the general practitioner (GP) shortage in primary care and its characteristics in Hungary (Papp et al, 2019). This was longitudinal follow-up study including all general practices and GPs in period 2007–2016, based on data provided by the National Institute of Health Insurance Fund Management (NIHIFM). Analyses were performed on changes in number, age and sex of GPs by the practice type (adult, paediatric and mixed), as well as on their geographical distribution and migration between areas characterised by deprivation index (DI) at municipality level. This research showed, that the number of general practices with unfilled GP posts was increasing exponentially, mainly in the most deprived areas of the country. The number of GPs in all types of practices decreased, in mixed (by 7.7%) and paediatric (by 6.5%) practices. The number of adult practices with unfilled GP posts doubled, while the number of paediatric practices with a vacancy for a paediatrician more than tripled. As a result of the migration, in the most deprived areas, the number of GPs decreased by 8.43%. The average age of GPs increased by 3.7 years in

adult, by 5.4 years in paediatric and by 4.2 years in mixed practices. According to the results of this study in 2007, 52.27% of the GPs were women, and this rate increased to 56.19% by the end of the decade. The association between deprivation and vacancy for GPs was studied by risk analysis and an exponential association between relative vacancy rate and deprivation was confirmed. Papp and his team concluded, that the workforce crisis in Hungarian primary healthcare is progressively deepening and resulting in more severe inequity in access to healthcare.

Kovács D. and her coauthors did a survey on the Hungarian healthcare practitioners' economic- migration and career changing attitude (Kovács et al, 2018). The aim of their investigation was to measure the mentioned attitudes and to present the influencing factors. They have used a self-edited questionnaire and a valid Effort-Reward Imbalance (ERI) questionnaire and 821 persons (nurses, physiotherapist, midwives, dietitians and nurses) have been included in the research. The studied population represented only 0.45% of the total filled healthcare posts in Hungary. More than half of the participants declared they are planning to leave the healthcare sector and 46.7% of the participants are planning to go abroad for work. More than half of the participants would leave the country particularly due to their low salary. According to the study results the low salary has strongly influenced the occurrence of foreign employment. Also, based on the results it has been concluded that the experienced stress at the workplace is stronger among those colleagues who are planning to leave Hungary or the healthcare sector. The level of the experienced stress rate was the highest among nurses, however there was no significant correlation between the profession and the level of the work-related stress. Kovács and her team emphasized, that the above-mentioned attitudes among the participants have several causes, the optimization of the healthcare practitioners' working conditions is a political and social interest and the reduction of the disadvantageous factors would require systemic intervention.

Vizsy and her team analyzed the motivations of Hungarian physiotherapists for working abroad and the satisfaction of the colleagues working abroad. In their research (Vizsy et al, 2019) they used a self-designed questionnaire and the Effort-Reward Imbalance (ERI) Questionnaire, in period between November 2018 and February 2019. 112 physiotherapists were included in the survey, mainly from France and Austria, as well as Germany, Switzerland, England, Italy, United Arab Emirates, Sweden and Belgium. From the data presented in this study, it is not clear which percentage of the Hungarian physiotherapists working abroad have filled the questionnaire. However, the available results showed physiotherapists' migration was primarily driven by the desire for a better quality of life, a more predictable vision and more favorable financial situation and better working conditions. Before leaving, 23.2% of physiotherapists planned to work abroad forever, while at the time of the survey this percentage increased to 46.4. The study emphasized the further foreign employment and remaining abroad is strongly influenced by and significantly positively correlated with the financial situation and the perception of the current life situation. Deeper analysis showed the perception

of the actual life situation is clearly related to the fact that it is not necessary to take a second job. 39.3% of the respondents claimed they do not face any negative factors in a foreign country, 26.8% highlighted no reasons for returning home, while 69.6% would return home with more favorable financial conditions and 51.8% with better working conditions. The change of these conditions would encourage more than half of physiotherapists working abroad to come home.

Szabó, Szöllösi and Talabér in their research (Szabó et al, 2020) examined the the child healthcare system in Hungary, focusing on its strengths and challenges. Analysing numerous official domestic and international data, in their publication they presented several important conclusions, including the statement that Hungary will face a major shortage of paediatricians within ten years. They emphasized this based on the data on average age of paediatricians in Hungary which is 59 years (46% of whom are aged over 60 years) and of the 1498 pediatric practices in the country, one-third are staffed by physicians aged 50–60 years. In Hungary paediatricians study for five years to care specifically for children, while family physicians receive only four months of pediatric training, which is not enough for them to have adequate competence in caring for children. All this could lead to the conclusion, that ten years from now, many of physicians aged 50–60 years will be retiring, leaving many empty positions with no one to take them. They highlighted, that several efforts have been already made to solve this complex problem.

5. Conclusions

Although only 2,75% of the complete population of Hungarian medical students has been investigated, and most of the data only reflect their desires and intentions, the proportion of those who imagine their future abroad is still high (more than 40%). Further research on the topic, involving more participants in the survey would be required, however, it is clear that among the motivations for employment abroad, the prevailing working conditions in healthcare, inadequate wages, and the general living conditions in Hungary are the most decisive. A salary increase may induce the repatriation of medical professionals working abroad, but the accompanying conditions of relocation imposed by the government may reduce the attractiveness of higher salaries, together with better working conditions abroad. Although there are significant efforts, there are still no completely defined government plans for the improvement of working conditions of healthcare workforce in Hungary. Examining the profile of migration, it can be seen that the situation is most critical in the professions of internal medicine, family medicine, and infant and pediatric medicine in terms of medical specialization, while in terms of county provision and demographics, there is the most prominent shortage of specialists in Békés, Nógrád, Jász-Nagykun-Szolnok, Tolna and Szabolcs-Szatmár-Bereg counties compared to other counties. Within ten years, Hungary will face a severe shortage of pediatricians. Low salaries and poor working conditions force doctors to either go abroad or work in private institutions. The average age of

pediatricians in Hungary is 59 years, 46% of them are over 60 years old. The labor crisis in Hungarian primary healthcare is gradually escalating and will result in increasingly serious inequalities in access to healthcare. It has been observed that the burnout syndrome among health workers (doctors) increases the willingness to work abroad. Optimizing the working conditions of healthcare workers is a political and social interest, which would probably take a long time, but could ensure high-quality care in the long run. One of the most important conclusions of the review is that Hungarian healthcare workers left abroad primarily because of better quality of life and more favorable financial conditions, but some of the research results showed, that changes in these conditions at home would encourage them to return home.

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SMEs FINANCING – AN OVERVIEW OF DIRECT FINANCING ON CAPITAL MARKET VS. FINANCIAL INSTITUTIONS

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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 also rely on external financing, not only through financial institutions but also through direct participation in the capital market. 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 founding, unlike in the United States of America, where the activity of stock exchanges is much more developed. This paper aims to study a shared analysis of the advantages and disadvantages of SMEs in Romania regarding financing through financial institutions vs direct participation in the capital market.*

Keywords: SME, bank financing, capital market

JEL classification: G15, G21

1. Introduction

The financing of SMEs, the engine of the economy, both on the capital market and through the banking system, has numerous benefits for the entrepreneurial environment and implicitly for the economy. SMEs request financing for investments or working capital, which leads to business development, and a developed business environment leads to a developed economy. Precisely because of this, the attention of governments around the world is turning towards SMEs and entrepreneurs, and towards the way in which they can be supported to become stronger and more sustainable.

The economy is in a continuous dynamic; the sources of financing are varied. This paper aims to study SMEs' access to financing from the perspective of intermediaries (financial institutions) and direct access to financing (capital market). The ways of financing SMEs differ depending on their type: micro-enterprises, small and medium-sized enterprises. In addition to the distinction of size, there are other characteristics, including seniority and the sector in which they operate, that require different approaches.

The distinction between different segments among SMEs is also important in terms of their financing needs and the different options to ease their financing constraints. Informal micro-entrepreneurs appear to be the 'ideal' clients for micro-financing institutions, which rely on community ties and 'informal types' of collaterals for their

loans (Beck, 2013). Many mid-sized businesses, on the other extreme, may be candidates to look beyond the banking system to capital market types of financing, including private equity funds or even listing on the stock exchange. The intermediate segment, “small” enterprises, seems to be the most complicated, as they are often limited to banks as their only provider of formal financing.

The capital market represents one of the pillars of a developed economy and contributes to the development of a healthy economic environment. The main role of the capital market in the economy is to provide financing for companies that need additional capital and to facilitate the transfer of available capital from investors to companies that intend to capitalize through the capital market. Private companies began to increasingly consider attracting financing from the capital markets at the expense of other sources of financing, an aspect that, in the long term, can result in the achievement of a general economic balance (Caraganciu, et al, 2005, p.10).

The paper is structured as follows: the first part contains introductory remarks regarding the importance and relevance of the topic addressed; the second part is dedicated to literature review that summarizes the main research undertaken so far on this topic and emphasizes the development of SMEs through accessing external financing represented by financial institutions and the capital market; the third part of the paper contains a comparative analysis of the advantages and disadvantages that SMEs have by accessing the financing offered on the two markets: the banking market and the capital market. The study ends with conclusions.

2. SMEs and the access to financing on the banking market and the capital market – literature review

If one takes into account SMEs' contribution to economic growth, supporting their development becomes obviously important. One of these channels through which SMEs contribute to economic development is that of creating new jobs. Recent cross-country survey evidence suggests that smaller firms not only provide the most jobs worldwide (Ayyagari, Beck, & Demirguc-Kunt, 2007), but also create more jobs than larger firms (Ayyagari, Demirguc-Kunt, & Maksimovic, 2011). However, according to Beck (2013), it is rather difficult to draw a clear result from this study.

There is significant evidence that financial development can contribute to job creation, and there is evidence that this is partly through the expansion of SME financing.

2.1. Constraints in SMEs' financing

Regarding access to bank financing, Beck (2013) identifies four problems. A first type of access problem is caused by demand. This problem can be highlighted by too few loan applicants simply due to self-exclusion resulting from cultural barriers or financial illiteracy. A second type of access problem may arise from regulatory distortions or insufficient contestability that cause lenders not to fully exploit all communication opportunities and thus settle at a point below the access possibilities frontier. A third access problem is associated with “excess access,” that is, an equilibrium above the affordability frontier, with loans extended to a higher share of borrowers than is prudently justified. A final access problem is a too-low level of prudent access possibilities, caused by weaknesses in an

economy's institutional framework compared to that of countries with similar levels of economic development.

For each of these problems, Beck (2013) offers solutions by referring to the specialized literature and empirical studies carried out in various countries. The first – demand-driven issues – calls for demand-side measures that educate and encourage healthy use of financial products by SMEs. While the specialized literature has traditionally focused on supply-side constraints, during recent years more studies of financial literacy for entrepreneurs have been seen. According to empirical studies conducted in various countries including Bosnia and Herzegovina (Bruhn and Zia, 2013), Peru (Karlan and Valdivia, 2011), Dominican Republic (Drexler, Fischer and Schoar, 2010), Sri Lanka (De Mel, McKenzie and Woodruff, 2012), Pakistan (Gine and Mansuri, 2011) and Central America (Klinger and Schündeln, 2011), there is a wide variation in findings, with the general conclusion being that tailored interventions can have an impact on entrepreneurship and business expansion under certain circumstances. The second issue requires interventions and policies that encourage financial institutions to maximize the achievement of SMEs' potential in the existing contractual and macroeconomic environment. Conversely, restrictive measures may be requested when loans are granted to a number of applicants in excess of what may be considered prudent. The last type of problem, too little prudential access, requires a set of policies that provide for general reforms of the business environment and institutional framework that are not specific to the SME credit market.

2.2. The effect of the structure of the banking system in SMEs financing

Across the globe there is great variation in the market and ownership structures of the banking system. On the one hand, there are many small and concentrated banking systems, especially in low-income countries, with often fewer than ten banks; on the other hand, Germany has several hundred small banks that operate locally. The structure of the market may change over time. Ownership structures also vary significantly across countries, with a few countries still relying heavily on government-owned banks, others having mostly domestic private banks, and others relying mostly on foreign ones, such as in many Central and Eastern European countries (Claessens and van Horen, 2014).

Both the specialized literature and the empirical studies are ambiguous about the effect of the market structure and the banking sector competition on accessing financing. While the traditional view of market efficiency holds that more competitive markets are conducive to accessing external financing (Pagano, 1993), others point to market power as providing the necessary incentives to establish long-term lending relationships (Petersen and Rajan, 1995).

Cetorelli and Gambera (2001) show that industries where young firms rely more on external financing grow faster in countries with more concentrated banking systems. Beck, Demirguc-Kunt, and Maksimovic (2004) show that barriers to accessing SME financing increase with banking concentration, but only in countries with low economic and institutional development. Carbo-Valverde, Rodriguez-Fernandez, and Udell (2009) find that greater competition improves credit availability for SMEs in Spain.

Related to the issue of market structure is that of bank size. It has often been assumed that smaller banks, with flatter hierarchies and shorter distance between the borrower and the final loan decision maker, are more favorable for small

business lending because they are more efficient at processing soft information (Berger and Udell, 1995; Stein, 2002).

Sapienza (2002) and Berger et al. (2005) confirm this hypothesis with data for the United States. Canales and Nanda (2012), on the other hand, show in the case of Mexico that more decentralized banks are more likely to make larger loans to small businesses, but are more likely to exploit their market power in concentrated markets. Looking beyond banks, Beck, Demirguc-Kunt, and Singer (2013) show that small-scale financial institutions that specifically target SMEs are not necessarily more efficient than large institutions.

The issue of market structure is also related to that of bank ownership. Foreign bank ownership has been particularly controversial in terms of its effects on SMEs' access to external finance. On the one hand, cross-border banks can help promote improved corporate governance, by bringing much-needed technology and experience, which should translate into increased efficiency of financial intermediation in small host countries. There is mixed evidence on the effect of domestic market penetration of foreign banks on SMEs' lending. On the one hand, evidence from firms suggests that firms report lower financing obstacles in countries with a higher share of foreign banks, a finding that holds for groups of firms of various sizes (Clarke, Cull, & Martinez Peria, 2006). Foreign banks bring the necessary know-how to implement new lending techniques. Mian(2006), Gormely (2006) suggest that foreign banks are much less willing to lend to small and opaque SMEs than domestic banks. Claessens and van Horen (2014) and Bruno and Hauswald (2008) show that foreign bank penetration has a positive effect in countries with more effective credit information sharing and creditor rights protection systems.

2.3 The link between lending techniques and SMEs' access to financing

Closely related to the debate on the market and ownership structure, the lending techniques that are most appropriate for SMEs are also studied. The traditional view of SMEs financing focuses on relationship lending.

Long-term relationships between a financial institution, or even a specific loan officer, allow for the overcoming of the risks generated by information asymmetry problems. The focus on relationship lending that underpins SMEs' financing shows that smaller, local financial institutions are more effective in lending to SMEs than large, foreign-owned banks.

According to the empirical studies presented in his paper, Norden (2015) concludes that relationship lending works and customers rely on it to obtain larger loans and lower interest rates. Furthermore, the existing competition between banks is beneficial for borrowers. The basic activity of a bank consists in attracting deposits and granting loans. Banks transform the risk of financial contracts, maturity; for example, deposits with a maturity of 6 months, which can be withdrawn at any time, have been transformed by banks into long-term investment loans granted to companies, even with the uncertainty of whether they will be repaid. Banks have added to their core business other ancillary activities, increasingly complex and interconnected.

Norden (2015) sees a bright side and a dark side of relationship lending. The bright side of the relationship between the bank and the borrower is a close relationship that reduces information asymmetry, and the dark side of this relationship is

represented by the retention problems in the interaction between the lender and the borrower. Furthermore, the existing competition between banks is beneficial for borrowers. Berger and Udell (2002) see relationship lending as the most important lending technique for many companies; according to Beck, Demirguc-Kunt and Martinez Peria (2011) it is the key to external financing, especially for SMEs. A close bank-borrower relationship can create benefits for both parties if inefficiencies arising from informational problems are reduced. On the one hand, banks can better assess default risk for existing borrowers, while they may benefit from improved credit conditions over time. On the other hand, banks could follow a cost strategy whereby they offer attractive credit terms at the beginning of a relationship to win over customers, then increase their costs for subsequent financing. Degryse and Ongena (2005) argue that the lending bank can have an informational monopoly over a borrower, since all information related to its activity is in the bank's possession, which can create a lock-in effect in the event of the termination of a bank-borrower relationship. A more nuanced view was presented by Berger and Udell (2006) and Torre, Martinez Peria, and Schmukler (2010) according to which large and foreign banks, compared to other institutions, may have a comparative advantage in financing SMEs through convenient lending technologies such as asset-based lending, factoring, leasing, credit scoring and centralized organizational structures. While relationship lending might thus be better done by small financial institutions, transaction-based lending is more cost-effectively done by large financial institutions that can exploit the necessary economies of technology investment. In many developing countries, this debate has an additional dimension, as smaller banks are often owned by domestic shareholders, while large financial institutions are often owned by foreigners. Using data for 91 banks from 45 countries, Beck, Demirguc-Kunt, and Martinez Peria (2011) find that foreign banks are more likely than domestic banks to use transaction-based lending techniques and centralized business models. They also show that foreign and domestic banks lend equally to SMEs. Thus, it appears that both relationship-based and transaction-based lending techniques are appropriate for lending to SMEs. There are also specific transaction-based lending techniques that appear particularly favorable for expanding SMEs' access to external financing. Leasing is an attractive financing tool for SMEs – from both a demand and supply perspective – as it is based on the cash flow generated by the financed asset, including tax advantages. Factoring, too, is attractive to small suppliers of large creditworthy buyers. Both leasing and factoring are based on a legal framework that regulates transactions. Thus, these techniques can help increase lending to SMEs, even if to a lesser extent.

2.4. SMEs financing offered by capital market

As we know, small and medium enterprises have a crucial influence on the economic development of every nation, but access to formal financing remains a barrier. Similarly, financial institutions face challenges in assessing the creditworthiness of SMEs for granting financing. Financial institutions use various appraisal models to identify potential borrowers and determine loan pricing and collateral requirements.

As far as the financing offered by the capital market is concerned, this is done either through the issue of bonds or through the issue of shares, an operation that directly impacts the equity (Darovanaia, 2005).

Obligatory loans (financing through the issuance of bonds) are characterized by the medium and long period during which they are issued, they bear interest and do not involve the listing of the issuing company on the capital market.

Most often, SMEs turn to the issue of shares to obtain financing on the capital market. By means of this financing method, SMEs obtain financing without immobilizing assets from the portfolio and without having a high cost of financing. Listing on the capital market implies compliance with certain conditions by the issuer. In the case of applying for a bank loan, SMEs must also meet certain eligibility conditions.

The financing of SMEs through the capital market requires specific knowledge of the functioning of the capital market (Sechel & Nichita, 2010).

The developed capital market facilitates access to financing, both for private and state entities (Sechel I. C., 2012). This is its most important role in the economy: to facilitate the transfer of capital from entities holding capital to those seeking capital (Sechel I. C., 2012). The capital market also offers newly established SMEs the opportunity to obtain credit, unlike the banking system, where, without a financial history, they do not meet the eligibility criteria for obtaining bank loans.

Through the issue of shares, SMEs benefit from non-reimbursable capital, compared to the issue of bonds or contracting a bank loan. However, practically, the issue and sale of shares represents the alienation of a part of the company to third parties. SMEs can use the capital obtained from the issue of shares according to current needs, without respecting certain conditions of use, as in the case of bank loans. The issue of shares, not bearing interest, as in the case of bank financing or the issue of bonds represents a net advantage, an attraction of resources without subsequent costs. The issue of shares involves certain initial costs, but subsequently the company's cash-flow is not burdened by interest payments.

If a company needs capital for a certain project and does not want to list on the stock exchange, it has the option of issuing bonds. Market conditions must also be taken into account in the issue of bonds, so that investors consider them favorable and be a source of profit for them as well. For example, if the coupon level is below the interest rate in the banking system, these bonds will not be attractive to potential investors.

In the situation of issuing bonds, SMEs turn to specialized companies that offer consultancy in the field of the capital market and that can offer them the best solutions. One of the advantages of bond issuing is the possibility for the issuer to "customize" its way of financing, while through the banking system it is much more rigid, SMEs having to adapt to the products offered by the bank.

SMEs that are looking for long-term financing and whose goal is long-term development usually opt for the listing of their own shares on the capital market to the detriment of the issue of bonds. Companies choose this method of financing for several reasons: failure to meet the eligibility criteria imposed by banks; lower financing costs compared to those offered by the banking system; lack of limitations regarding the requested capital; increased visibility of the company in the business environment; the lack of guarantees requested by the banks or even for the sale of some share packages by the shareholders who want to leave the company.

3. SMEs in Romania - bank financing vs. capital market - advantages and disadvantages

In recent years, there has been an increase in the interest of Romanian SMEs in obtaining financing from the capital market, but despite this, the level is low compared to other countries, with the banking system holding supremacy. This is not true for commercial companies in the United States of America, where a considerable percentage of companies are financed on the capital market.

In order for the capital market to become an option for SMEs that want financing, support from the state is also necessary through the implementation of fiscal policies that stimulate stock market activity and increase its degree of attractiveness by popularizing successful examples of companies that opted for financing on the capital market.

Due to the presence of foreign actors in the Romanian economy, both in the banking area and the stock market, the financial market has adapted to international standards. The development of the economy was supported by the development of the two components of the financial area, the banking market and the capital market. Initially, the banking market experienced a more accelerated development at the expense of the capital market. Probably due to lack of experience, fear and mistrust, some of the SMEs eligible for listing on the stock exchange did not consider this method of financing, limiting themselves to obtaining financing through banking entities. A key element that led to the change of this perception was the development of the capital market in Romania, as well as the visible success of the companies listed on the Bucharest Stock Exchange.

From the perspective of financing, most SMEs accept the conditions imposed by banks. Of course, there are also cases of SMEs with good financial conditions and a long history of collaboration with the bank, which have the possibility of negotiating credit terms. As in the case of financing through the capital market, SMEs must meet a series of criteria that lead to the calculation of the scoring of the respective company and on the basis of which the crediting criteria can be established. SMEs are perceived by financial institutions to be less organized in terms of financial data management compared to large corporations, which makes credit risk assessment based on inadequate financial data raise questions for financial institutions. Most of the existing scoring models are based on financial data.

Generally, in Romania, from the category of SMEs, micro-enterprises and small enterprises opt for classical financing through the banking system, while medium-sized enterprises also consider the option of listing on the stock exchange.

A real advantage of the banking system is represented by short-term loans and the relatively short time in which banks provide companies with the necessary capital, in the case of credit lines and loans for short-term current needs. This type of lending cannot take place through the capital market, especially due to the longer period of issuing bonds or listing on the stock exchange.

Another difference between financing through the banking system and that through the capital market consists in the interest rate fluctuation on the banking market, this being influenced by the monetary policies at the level of the economy compared to the capital market, where in the case of bond issuance a fixed coupon rate is offered. Two situations can be encountered: if the fixed rate of the coupon is more advantageous than the variable interest on bank loans, if it registers an increase between the moment of granting and the moment of maturity. However,

the opposite situation is also possible, in which the variable interest rate on bank loans decreases compared to the fixed rate of the coupon. In this context, companies have the opportunity to contract a bank loan at a more advantageous cost through which they can redeem the issued bonds in advance.

Currently, SMEs in Romania can be financed on the capital market either by listing on the main or secondary market (depending on the criteria that must be met), or by issuing bonds. Financing through the capital market offers both opportunities and risks. Every SME that wants to access financing through the stock exchange must do a thorough analysis of both the advantages offered and the disadvantages.

In Romania, we still encounter a reluctance of companies to call on the capital market. Among the identified fears, one can name the following: directly affecting the company in case of financial crises, the reduced desire of companies participating in the capital market regarding the transparency of financial results, the fear of losing control of the companies, and even the increase in the level of bureaucracy in relation to the financial authorities and the investors. That is why many SMEs in Romania still prefer financing through the banking system. Even the companies listed on the stock exchange and which obtain their financing through the capital market, also turn to bank financing in parallel.

Table 1: Differences between direct financing through the capital market and financing through the banking system through a SWOT analysis

	<i>Financing through the capital market</i>	<i>Financing through the banking system</i>
<i>Strengths</i>	<i>The possibility of personalized financing according to needs Transparency of companies participating in the capital market Low financing costs</i>	<i>The main financing option for SMEs in Romania The financing is granted for a short period and in relatively short time The stability of the banking system, which leads to a high confidence of SMEs Extended territorial coverage Continuous training of employees and adaptability to new realities</i>
<i>Weaknesses</i>	<i>The reluctance of companies to finance themselves on the capital market generated by the lack of trust High level of bureaucracy The need for qualified personnel in the relationship with investors and the authorities</i>	<i>The rigidity of financing criteria, especially for micro-enterprises and small enterprises Request for guarantees Restrictive financing conditions for start-up companies</i>
<i>Opportunities</i>	<i>Identifying the multitude of financing solutions Start-up companies can be financed The opportunity to interact with</i>	<i>Financing SMEs by offering them customized products The import of technology and knowledge from the parent banks</i>

	<i>various national and international companies</i>	<i>Accelerated digitalization of the banking system</i>
<i>Threats</i>	<i>The quick reaction of the stock market to external factors, leading to the fluctuation of the company's value The risk of losing control of the company</i>	<i>Interest rate increases determined by external factors (financial crises, war) Failure to meet customers' needs and expectations</i>

Source: Own adaptation based on data provided by the Bucharest Stock Exchange and the National Bank of Romania

4. Conclusions

Supporting the development of SMEs, the engine of the economy, must be done by facilitating access to both bank financing and by supporting them in the financing process through the capital market by ensuring appropriate fiscal measures and a stable legislative framework. In some developed economies, the banking system no longer holds supremacy in lending activity. In Romania, we still encounter a reluctance of SMEs to apply for financing through the capital market, probably due to mistrust, fear, lack of experience. In order to change this perception, successful examples of SMEs financed on the capital market should be publicized.

Financing through the capital market as well as through the banking system offers both opportunities and risks, so a SWOT analysis can be done by any SME that needs financing and meets the criteria for both bank financing and direct financing on the capital market for choosing the best option according to needs. Thus, we consider that there is no correct or incorrect decision regarding the choice of one of the two financing methods, but rather it depends on the opportunities that SMEs consider to be more favorable at the time. Any option chosen must be supported, the final goal being stronger and more sustainable SMEs, which will lead to economic growth and implicitly a better standard of living.

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SECTION FINANCE, BANKING, ACCOUNTING AND AUDIT

FINANCIAL REPORTING IN A EUROPEAN SINGLE ELECTRONIC FORMAT

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Abstract: *Companies with securities traded on a regulated market prepare financial statements in accordance with International Financial Reporting Standards (IFRS) and must take into account the European Single Electronic Format (ESEF) reporting requirement. was postponed by one year in 2021, coming into force for the reporting period beginning on or after the 1st of January 2021. Therefore, according to the European regulatory framework, sole proprietorships that have securities traded on a regulated market must prepare in full the annual financial statements in the Extensible Hypertext Markup Language (xHTML) format. This article aims to show what ESEF reporting is and the eXtensible Business Reporting Language (XBRL), which are the benefits of digital business reporting and the opportunities that arise from using XBRL.*

Keywords: *digitization, XBRL, IFRS, financial reporting, Single European Format, digital accounting*

JEL classification: *M40, M41, M42*

1.Introduction

In nowadays social and political context, see digitalization as the engine of global economic growth. The constraints of the COVID-19 pandemic affected the developments and there was a bigger need to make progress in a sustainable manner. In order to achieve the goal of developing sustainable solutions that can enable the digital transformation, the European Union and the European Commission has set three major objectives for the period 2020-2025: firstly, the technologies should support citizens' needs; secondly, a fair and competitive economy must be developed; and thirdly, an open, democratic and sustainable society should be achieved (Ionescu, 2022).

If a financial information user intends to perform a detailed analysis or comparison, and the approach requires more financial statements, different as a source and period, this will be forced to achieve a reintroduction of data, because they cannot be obtained from the Web in a general format accepted and intended for financial reporting. The main goal of promoting Extensible Financial Reporting Language (XBRL) is to address these issues, as well as to provide a standardized method of preparing, publishing, and transferring information in the area of financial reporting (Mangiuc, 2009). Due to the involvement of a growing number of entities

recognized at European level or locally in promoting the language, XBRL has experienced a large expansion in Europe. It is also a growth in designing taxonomies regarding various aspects of business reporting, and in creating new software or using the reporting standard. The XBRL ongoing projects are: the financial reporting; the prudential reporting; the tax information; the preparation of credit reports, economic statistics, corporate social responsibility reports, etc. (Enachi, 2015).

2.Extensible Business Reporting Language

XBRL, a close relative of the generic XML language, was born in the United States and is an Internet-based technology that is rapidly evolving to an international financial reporting standard. XBRL has been compared to entering barcodes or entering the ISBN number for books. The SEC has taken a number of important steps in implementing XBRL. Investors may request insurance during the process of framing, labelling financial information. The Public Company Accounting Oversight Board (PCAOB) has initiated general rules for attesting commitments to XBRL financial information, based on the voluntary completion of certain files at the request of the SEC, which is based on the approval of the XBRL version to the auditor.

XBRL is a language used for the electronic communication of business and financial data, which is revolutionizing business reporting from across the world. XBRL enable business to generate their required reporting information directly from their financial data. It is a consistent tool also useful for comparability and overall business (Mosteanu, 2020).

evaluation. XBRL is a universal electronic business language for information, reporting and analysis, an easier, faster and more efficient means of communicating financial accounting information. XBRL creates a link between information technology (XML) and accounting standards (GAAP). Raising the quality of financial information means extending its transparency, complying with legal regulations, simplifying and preparing them quickly. The quality of the financial statements is regulated by an insurance service. Thanks to its independence from the software and hardware platform, "XBRL is able to use the Internet for reporting, which provides an ideal basis for achieving a standard", because an XBRL taxonomy is a translation of GAAP into XML documents. XML-based work provides the financial community with a standards-based method of preparation, publication in a variety of formats, accurate extraction, and automatic exchange of corporate financial statements. XBRL allows software vendors, programmers, and users to identify specifications to enhance the creation, exchange, and comparison of reporting information by adding extensible semantics. These are possible by applying the concept of taxonomy.

In order to be able to report and distribute financial-accounting information in a consistent form, the creators of the XBRL language aim to develop a unitary vocabulary, respected in all documents reported in the net Internet network, throughout the information life cycle, starting with the creation primary documents (invoices, orders, etc.), other documents for the operations of collection, aggregation and processing of financial-accounting information, and finalizing with

legal regulations, statements of any kind and other reports of the enterprise (Andone, 2004).

Several advantages with the XBRL reporting taxonomy are identified (Beerbaum, 2021). These advantages manifest through:

- Reducing information asymmetries of the capital market
- Enabling participants in the financial supply chain to make an improvement of the exchange of business reporting information
- Providing a standardized format to the users
- Enabling software applications to exchange information without data migration
- Entitling the automatic processing of information with the help of software applications
- Reducing costs, as XBRL supports automated processing of financial and non-financial information
- Facilitating the access to more granular data
- Including the reference to the domain concept, e.g. the accounting standard
- Including specifications about the reporting entity, which consist of meta data required for the monthly management report and the interpretation of the information
- Recognizing international taxonomies in multi-language and multi-translation support
- Extending reporting elements due to company-specific reasons for the flexibility of the users
- Implementing the core information needs of the user
- Not requiring specification of text formatting in XBRL, as the instance file is coded and not human readable
- Regarding viewers, such as the SEC XBRL viewer enables conversion of the instance file and
- Allowing the report to be displayed in a standardized format.

Among the potential benefits for accounting and auditing professionals of adopting XBRL, the most important are the following (Mangiuc, 2009):

- data in XBRL format are structured by marking with a set of XML tags that describe their content and relationships, providing a simpler and more efficient multi-criteria search mechanism in financial information sets;
- XBRL documents are prepared and made in accordance with a standard taxonomy, unanimously accepted and, as a result, data can be transferred and processed without any modification or conversion efforts;
- XBRL is independent of the platform and the operating system used, which facilitates the free exchange of data;
- information in XBRL format is entered only once, and is then available indefinitely for a wide range of standard or custom reports, meeting the requirements of many types of users. As this facilitates “digital” financial reporting

without print support, it helps to streamline the cost-effective reporting process by reducing the resources required for data processing;

- XBRL files can be edited, processed or interpreted with the help of parser programs. As a result, electronic financial statements can be quickly and cost-effectively converted into web pages or datasets for spreadsheet applications, database management systems, decision support systems, or expert systems and applications, in the field of artificial intelligence. Financial data can be sent to a web browser for display, printed or used as a basis for creating new financial documents (e.g. consolidated financial statements);
- XBRL significantly improves the efficiency of the process of simultaneous analysis of financial information from different sources. Although it does not, by its nature, guarantee an increase in the amount of financial information available in electronic format, XBRL guarantees the possibility of uniform interpretation, analysis and processing of existing financial information;
- XBRL is widely available as an open standard.

3.XBRL in Europe and Romania

Companies with securities traded on a regulated market prepare financial statements in accordance with International Financial Reporting Standards (IFRS) and must take into account the European Single Electronic Format (ESEF) reporting requirement which was postponed by one year in 2021, coming into force for the reporting period beginning on or after the 1st of January 2021. Thus, according to the European regulatory framework, sole proprietorships that have securities traded on a regulated market must prepare in full the annual financial statements in the Extensible Hypertext Markup Language (xHTML) format.

In addition, listed companies preparing consolidated financial statements must take into account that they must be marked using the eXtensible Business Reporting Language (XBRL), in accordance with the IFRS-ESEF taxonomy. At the moment, companies are required to label only the primary financial statements, and after January 1, 2022, the labelling of notes will become mandatory. Listed companies preparing annual individual financial statements must also prepare these reports in xHTML format, but without labelling using the XBRL language in accordance with the IFRS-ESEF taxonomy.

Some companies have decided to report their financial statements using the new format as early as 2020, which has given them better visibility into how XBRL is labelled. Currently, companies preparing for these reports should be aware of a number of errors in the technical aspects or the selection of labels and their use, which have occurred during the use of the language and have been detected so far.

XBRL reporting involves the generation of three files. These can be found in the compressed reporting file (zip format) which should have a standard structure, allowing the auditor and regulators to import the file into the software used for further analysis. Errors importing the file may occur when certain folders in the reporting files are missing or the extensions used are incorrect. This leads to the inability to import the file and the inability to perform further verification and analysis.

Common types of technical errors include inconsistent calculations within the file, incorrectly assigned parent-child relationships, inconsistent use of custom tags

(extension tags) or standard ones, errors in assigning decimals, as well as incorrect use of plus / minus signs attributed to financial statements.

Companies should also consider potential errors that may occur when selecting and using labels. One of the most common problems is choosing the right labels for the company. Thus, the labels selected may be too general, without adequately reflecting the accounting nature of the financial statement line, or too specific, without fully reflecting the nature of the financial item. Some companies choose to create custom tags (extension tags) instead of using standard ESEF taxonomy tags. This may be appropriate in certain circumstances when it comes to specific aspects of an industry, but in most cases, the ESEF taxonomy already contains labels that are appropriate to the company's needs. From experience, a balanced ratio between standard labels and extension labels would be around 85-15.

If extension tags are used, it is very important to have a suitable anchor for each of the tags, either one with a smaller coverage area or a more general one. In this situation, the most common problem is the assignment of an overly general anchor that does not adequately reflect the accounting nature of the item to which it is attached.

Greater attention should also be paid to the plus / minus signs attributed to the items in the financial statements, as this error is likely to lead to significant misstatements. One important thing to note is that some labels may have different signs depending on the specifics of the line in the company's financial statements, such as "ProfitLossFromOperatingActivities" or "OtherGainsLosses".

In order to minimize the chances of these errors occurring, whether technical or occurring when selecting labels and using them, companies are encouraged to start preparing for the ESEF reporting process in a timely manner. The company has the opportunity to purchase a software solution and perform internal labelling or may outsource this process. Whatever the decision in this regard, the company should consider taking a step prior to the reporting for the current period, namely the labelling of the financial statements for the previous financial year. Therefore, the company has enough time to resolve any technical or labelling errors that may occur. Subsequently, the labelling of the financial statements for the current period (for the financial year beginning on or after the 1st of January 2021) will be performed much faster.

Postponement or failure to perform early labelling on the basis of the previous year's financial statements may lead to a significant delay in the annual financial reporting. In order to avoid delays at the last minute, it is good practice, in addition to pre-labelling the financial statements for the previous year, to establish adequate communication between all participants in this process, namely the company, software provider, external consultant and company auditor.

4. In conclusions

XBRL (Extended Business Reporting Language) is an international standard that was created in 1998 to facilitate the production and presentation of financial data. The purpose of XBRL is to automate the preparation, communication and use of financial reports and business information for decision making. The XBRL standard allows users around the world to access relevant financial information in a timely manner. The role of this reporting is to standardize and provide transparency to

financial data published worldwide. The impact of standardized financial reporting will mean streamlining reporting, transparency and reducing errors and a lack of economic and financial information. It will also reduce the time that users of this data will be able to access and use it.

Globally, XBRL is being applied more and more, being adopted by regulators and public institutions, followed by corporations and investors. In Europe, XBRL was established as a standard by both the European Banking Authority and EIOPA - The European Insurance and Occupational Pensions Authority. The adoption of XBRL in Romania would drastically reduce the costs of collecting and validating information from reporting, conversion, dissemination and exchange. The beneficiaries on the adoption of the ESEF-XBRL reporting standard in Romania would be: Romanian Government, Romanian Ministry of Finance, Banking Financial System, Romanian Chamber of Auditors, Romanian Body of Chartered Accountants and Chartered Accountants, Local Financial Administrations, Commercial Companies, National Investors and international.

Romanian companies using XBRL reduce their costs and time for processing, collecting, processing data for financial reporting. Users of financial data will be able to receive, compare and use data much faster and more efficiently. In addition, it will significantly increase the speed of financial data management, reducing errors and allowing automatic verification of information.

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WHO IS GOING TO WIN: THE EU ESG REGULATION OR THE REST OF THE WORLD? – A CRITICAL REVIEW

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Abstract: *This paper aims to explore the past and the present challenges of EU ESG regulatory framework. Moreover, it attempts to make an in-depth analysis of the major ESG frameworks and standards used at a global level: GRI, SASB, IIRC, CDP, CDSB, TCFD, CSRD, and EU Taxonomy. The analysis considers 5 criteria: framework vs. standard, shareholder perspective, reporting format, metrics, and materiality. In addition, we draw insights into the complexity of the EU ESG reporting scheme and its added value compared to already existing frameworks and standards. Our results have implications on three levels: 1) for reporting companies that are faced with the option of selecting a reporting framework that will minimize the cost of compliance but also help them implement their climate transition strategy; 2) for employees and consumers of goods and services provided by companies that incorporate ESG in their long term economic activities and 3) policymakers that want to make sure they design the best standards that will ensure a smoother and effective transition to a low carbon economy.*

Keywords: ESG; SDG; sustainable finance; EU Taxonomy

JEL Classification: G11; Q56; D53; P34

1. Introduction

ESG as an integrated business concept and is relatively new. If we do a simple historical analysis in the databases for the academic citations, the ESG concept has been developed in terms of academic contributions since 2005 with much higher dynamics beyond 2010. Considering a simple search in the databases for academic citations with the keyword “ESG” in the fields of finance, management, economics, and sustainable development, about 60% of the academic contributions were created in the last 4-5 years (excluding 2021). These findings show that the concept of ESG is still at the growth stage in the life cycle of an integrated approach to the value creation of a company. The “ESG” concept and the terminology were first mentioned in the report “Who Cares Wins” (International Finance Corporation, 2005) issued by International Finance Corporation in association with the Global Compact in 2005. Later, in 2006 it was considered in

the United Nation's Principles for Responsible Investment (PRI) report. Looking into these aspects, it is worth analyzing the relevancy of the academic contribution starting from 2007, as it is an obvious reaction of the academic community to the new approach of factor analysis of investment processes and decision-making. As Afolabi et al. (2022) shows, as long as the existence of a desire for the hegemony of the various regulators will persist, the harmonization of the sustainability reporting framework is not going to be any nearer. It was found that the European ESG regulatory framework is still young, compared with other non-financial initiatives, but its structure is complex as the European commitment towards sustainability is the most advanced at the global level. Not having a harmonized non-financial reporting system is creating problems for reporting entities and stakeholders in building a common understanding of the companies' sustainability performance.

Given the diverse methodologies on which sustainability standards are being constructed and integrated into the annual financial reporting of businesses the questions worth asking are: What is the added value of the EU ESG regulatory framework in the context of sustainability reporting? How is it different from the already existing frameworks and standards? What is the perspective of the stakeholders and of the companies operating in the European Market? This paper tries to answer these questions by performing a critical analysis of the most used ESG standards frameworks and the newly created EU regulations on ESG. Section 2 outlines the main regulations that govern the EU ESG reporting framework. In section 3 we perform an in-depth analysis of the main ESG regulatory standards and frameworks based on 6 criteria: purpose, framework vs. standard, reporting format, target audience, metrics, and materiality. Section 5 concludes with recommendations and limitations of our study.

2. The EU ESG regulatory framework

The European Commission has created a comprehensive policy agenda to promote sustainable finance in order to meet its objective of becoming carbon neutral by 2050. The 2018 10-point Sustainable Finance Action Plan intends to manage financial risks associated with environmental, social, and governance (ESG) challenges while directing capital flows toward sustainable initiatives.

The EU ESG framework is conceived under three pillars, in particular:

1. Non-financial disclosures - comprehensive disclosures for both financial and non-financial undertakings with the aim to provide investors with transparent information in the decision-making process.
2. The EU Taxonomy – a common classification for economic activities that are considered “green”, by ensuring that companies contribute to the environmental objectives in a sustainable way.
3. Products & labels: preventing greenwashing for market participants, investors, and countries in order to develop sustainable investment solutions.

The NFRD (Directive 2014/95/EU) is one of the first regulations that introduced mandatory sustainability reporting for certain large companies operating in the EU. Its aim is to set mandatory reporting requirements for companies by publishing non-financial information related to their efforts to protect the environment, ensure diversity in their working environment, and mitigate against anti-corruption and bribery matters. The EU taxonomy is a classification tool which determines

whether an economic activity is deemed environmentally sustainable or not. Its main purpose is to help investors, companies, and policymakers make more informed decisions by identifying activities that are believed to make a significant contribution to environmental goals and thereby help fund the transition to a more sustainable economy. By the same token, the EU taxonomy creates a common language in the field of sustainable development by setting clear standards to prevent greenwashing and enforcing them. The EU Taxonomy Regulation applies to: 1) financial market participants offering financial products in the EU, including occupational pension providers; 2) large companies that are already required to file a non-financial statement under the Non-Financial Reporting Directive (NFRD); 3) the EU and Member States when setting public policies, standards or labels for green financial products or green (corporate) bonds.

3. Analysis and Discussion

This section will focus on the analysis of the major frameworks and standards used by companies when reporting their ESG data. The study uses six criteria to extract insight into the added value of creating an ESG standard at the EU level. Table 1 depicts the parallel between the most used ESG reporting framework and schemes based on the five criteria mentioned above. It explores the difference between standard vs. framework, reporting format, and its targeted audience. Furthermore, it touches on complex issues like materiality and employed metrics that are susceptible to confusion among the reporting companies and policymakers.

3.1. Framework vs. Standard

An ESG framework has a broad scope and is meant to outline a “frame” to contextualize information and to set principles and guidelines when reporting sustainability data. It does not provide a specific methodology on how to collect and report data but it provides a certain flexibility in defining the desired direction. On the contrary, an ESG standard is very specific outlining criteria on how the data needs to be collected. Moreover, it has specific instructions and templates on how to report sustainability information. In this respect, standards are very efficient in making frameworks more practical because it does not only improve the reliability of data disclosed but also make it more comparable.

Frameworks can imply a voluntary disclosure in which companies actively disclose their ESG-related data. This is the case of CDP which collects data based on a standardized questionnaire on different issues related to sustainability. IIRC and TCFD are both based on voluntary disclosures and are more aimed at providing recommendations on climate change reporting. GRI, SASB and CDSB are considered standards as they provide clear metrics on disclosing issues related to environmental, social, and governance issues. ESG standards are preferable against frameworks because they foster transparency, effective reporting, and comparability. If companies have a clear methodology of measuring the impact of their economic activities, they are more likely to achieve greater carbon mitigation. This is even more crucial in weak institutional settings where national governments have less stringent regulations and people have lower climate change awareness (Luo and Tang, 2022). The new EU taxonomy and the CSRD will become EU standards in ESG reporting, a statement confirmed by the

European Parliament: “[The CSRD will] end greenwashing, strengthen the EU’s social market economy and lay the groundwork for sustainability reporting standards at global level.” (EP, 2022).

Given the new EU ESG regulations, it will become increasingly burdensome for companies that operate in international markets to report based on different standards. A KPMG survey showed that 73% of the largest 250 global companies are using the GRI standards when reporting sustainability data (KPMG, 2020). As the EU regulations will be transposed in Member States, the cost of compliance could deter companies from reporting based on their usual standard, making EU ESG a worldwide standard. It could also influence regulation at the global level laying the ground for regulatory arbitrage (Rocio et de Mariz, 2022) or as Kate Vyvyan from Clifford Chance termed it “taxonomy shopping” (Global Capital 2021). Currently, under the existing ESG frameworks and standards, carbon emissions are disclosed on a voluntary basis or are mandated by some regulations in force. In the case of EU taxonomy, ESG disclosure will be mandatory which can generate effects on the way companies behave in relation to their sustainability strategy. In fact, the latest research shows that mandatory disclosures led to an economically significant reduction of greenhouse gas emissions in the UK (Downar et al., 2020). Similar findings have been registered in the US (Tomar, 2019). In China, Chen et al., (2018) shows that mandatory reporting on ESG data generates lower levels of pollution in the local area with lower levels of profitability.

3.2. Reporting format

The most common report used by companies is called the Annual report and is meant to produce only financial data related to the performance of the company during the reporting year. The ESG or Sustainability report allows companies to provide relevant ESG data in one document that was specifically built for sustainability data reporting. Integrated reporting combines both financial and sustainability data with the purpose of showing its stakeholders how sustainability matters are connected to the business model the company strives to achieve. Independent ESG reporting and integrated reporting have their advantages and disadvantages. To name a few, independent ESG reporting allows companies to share as much information as necessary about their long-term strategy on sustainability or achievements. A study on Japanese companies showed that firms that follow ESG guidelines disclose 39% more data on sustainability than firms that publish ESG data in integrated reporting (Darnall et al., 2022). The amount of data disclosed in ESG reporting has been proven to be linked with the economic performance, size, leverage, and profitability of firms (Rahman and Alsayegh, 2021). Moreover, it’s more appealing to stakeholders that are more interested in ESG data and not in financial achievements. On the other side, independent ESG reporting can have its downsides. It can downturn early investors that only look at the annual financial report and are not aware of the existence of a sustainability strategy. Integrated reports usually need a green light from the board of investors that ultimately leads to cooperation between the ESG and Finance departments. Moreover, in integrated reports, sustainability is dependent on annual financial reporting. For this reason, integrated reporting supports the commitments of companies to report both financial and ESG data in the same time frame.

Table 1. Differences between the most used ESG reporting frameworks and standards

	<i>GRI</i>	<i>SASB</i>	<i>IIRC</i>	<i>CDP</i>	<i>CDSB</i>	<i>TCFD</i>	<i>EU ESG regulations</i>	
							<i>EU Taxonomy</i>	<i>NFRD/ CSRD</i>
Purpose	Focuses on helping organizations communicate about sustainability topics and their impacts, along with how these impacts are managed at the organizational level.	Focuses on developing and disseminating sustainability accounting standards that help public corporations disclose material, decision-useful information to investors.	Aims to create a globally accepted framework for reporting on value creation over time.	Addresses the creation of a sustainable economy by measuring and acting on the environmental impact of the company's activities.	Targets the applicability of traditional financial accounting, and reporting standards to guidelines on disclosure about climate, natural capital, and environmental information.	Focuses on helping organizations disclose information about the financial impacts related to climate change risks and opportunities.	Provides companies, investors, and policymakers with appropriate definitions for which economic activities can be considered environmentally sustainable.	Make non-financial information available to stakeholders and investors to determine the companies' value creation and risks, and encourage society to take responsibility for social and environmental concerns.
Standard/ Framework	Standard	Standard	Framework	Framework	Standard	Framework	Standard	Standard
Reporting format	ESG reporting	ESG reporting	Integrated reporting	Integrated reporting	Annual & integrated reporting	Integrated reporting	ESG reporting	ESG reporting
Target audience	Investors - internal and external to the reporting organization	Shareholders and other providers of capital, communities, customers, employees, suppliers, civil society, governments, investors, lenders, rating agencies, and insurance underwriters.	Investors - internal and external to the reporting organization	Investors, purchasers, and city stakeholders	Investors and financial markets	Investors, lenders, and insurance underwriters ("primary users")	Investors, lenders, policymakers, governments,	Investors, lenders, civil society
Metrics	Combination of qualitative and quantitative information.	Combination of quantitative (benchmarking within the industry and historical performance) and qualitative data.	Combination of quantitative (KPI) and qualitative data.	Quantitative and qualitative data	Quantitative and qualitative results, together with the methodologies used.	Quantitative and qualitative data	Quantitative and qualitative data	Quantitative and qualitative data
Materiality	Double materiality: measures company's performance and the material impact that the company has on its external environment	Impact materiality: Sustainability issues that have a material impact on the financial performance of the company	Impact materiality: reporting on activities that have a material impact on the organization's ability to create value.	Double-materiality: assessing the impacts of the company («inside-out») and («outside-in»)	Single materiality: reporting on data related to environment and climate change	Double materiality: reporting on financial and natural capital	Double materiality: achievement of objectives and DNSH principle	Double materiality: financial and social and environmental impact of the company

Source: Authors' own elaboration

There are however disadvantages when it comes to integrated reporting. Most of them are related to the cost of compliance for reporting companies as they need to gather sufficient knowledge on ESG indicators and their implementation in the real life of the organization. It can also lead to greater stress for the organization due to tighter deadlines as sustainable data needs to be presented at the same time as financial data.

3.3. Target Audience and Shareholder's Perspectives.

Financial reporting has been usually addressed to investors while non-financial reporting and ESG reporting can be targeted to all stakeholders involved, be it civil society, employees, policymakers, or rating agencies. To better present the ecosystem of sustainable development interactions between players/stakeholders we are going to remodel the framework proposed by de Souza Cunha (2021). Table 2 illustrates the idea of this framework which is going to reveal generically three important pillars that interact to build a solid ground for sustainable development: sustainable capital, the regulatory framework for sustainable development, and the stakeholder's perspective.

Table 2. Stakeholder perspective of sustainable finance.

	Providers of sustainable finances	Beneficiaries of sustainable finances	Supporters of sustainable development	Beneficiaries sustainable development
Market participants	Investors and financial institutions	Corporations / Financial institutions	Governments, NGOs, stock exchanges, Regulatory Financial Authorities, Rating Agencies etc.	Civil society, Business community and environment
Regulatory Framework	GRI, SASB, IIRC, CDSB, TCFD	GRI, SASB, IIRC, CDSB, TCFD	GRI, NFRD/CSRD, EU Taxonomy	GRI, NFRD/CSRD, EU Taxonomy, SASB
Strategies	Internalization of sustainability	Internalization of sustainability	Assurance of sustainable development regulatory ecosystem	To monitor and challenge the sustainable finance market improvement
Performance and metrics for sustainable finances	Risk-adjusted returns, increased public reputation and image	Lower cost of capital, improved corporate performance	The non-financial regulatory framework, standards for sustainable finance, rating, indexes, etc.	Achievement of sustainability targets.

Source: Authors' adaptation based on De Souza Cunha et. al, 2021

Providers of sustainable capital are those that trigger the transformation process. They are willing to have such reporting framework and monitoring system for sustainability performance from the perspective of risk-return profile. Such a system will provide but will not guarantee a lower business risk, a better risk-return performance, and a better reputational image. According to Eurofis report 2021, the past years were commercially favourable for ESG investments in terms of performance and growth in assets. Interestingly, this information was extracted from reports structured according to SFDR especially Article 8 "light green" or Article 9 "dark green".

Next, the beneficiaries of green finance are those that are seeking to implement the corporate sustainable development strategy. For this reason, they should have

to set up “green projects” and obtain investment capital at lower financing costs. The beneficiary perspective should be considered in the process of creating sustainable development policies. Supporters of sustainable development are those that create the policies and regulatory framework. In the regulatory process, they put together and should represent the interests of all stakeholders. The beneficiaries of sustainable development initiatives are the most complex structure of stakeholders (e.g. civil society, employees, customers, etc.) which must be treated very carefully both in the process of setting up the regulatory framework and in assessing correctly the impact materiality.

Considering a stakeholder’s perspective, the policymakers should internalize in their strategy the full commitment and continuous improvement approach. For example, the regulatory body should strengthen the stewardship and engagement framework of the Shareholder Rights Directive II and concentrate more on the outcomes. Therefore, they proposed a Renewed sustainable Finance strategy instead of having only “comply-or-explain” to have implemented engagement policies and activities for sustainability performance assessment, control, and corrections (Eurosif Report, 2021).

Referring to the above, some regulatory setters are considering the multi-stakeholder view when preparing the non-financial regulatory framework (e.g. EU Standard setters, GRI), and some of them only present the investors/firms interests (e.g. IIRS, SASB). In this respect, the EU Taxonomy and the CSRD bring added value to all stakeholders as it aims at creating a common language that investors and business can use when investing in different economic activities. It focuses on increased transparency and disclosure of non-financial information that in turn fosters incentives for the private sector to invest in the production of low carbon goods and services. It also aligns Member States on their national policies related to climate transition and attempts to educate communities and people about concepts like climate change, sustainable investments, and green performance.

3.4. Metrics

The main aim of ESG disclosure is to capture, as accurately as possible, the performance of the company in relation to its impacts on the environment and people affected by its economic activities. Most frameworks and standards analyzed in this paper provide a combination of quantitative and qualitative metrics. Given the multitude of frameworks and standards, it becomes increasingly difficult for all stakeholders involved to benchmark indicators reported in disclosures. Inconsistencies have been reported in the way companies report their data related to specific indicators. As the metrics are different depending on the framework used, the indicators become difficult to compare between companies from the same sector if the indicator employs different units of measure. Kotsantonis and Serafeim (2019) showed that ESG data is inconsistent and difficult to compare among different frameworks and standards. This in fact, not only affects the performance of the company but also its ability to minimize negative impacts on the environment.

There are also differences in process-focused verification versus content-focus verification. While the former deals with the rules and standards that need to follow in their disclosure, the latter deals with the accuracy, and completeness of ESG

data reported. GRI, SASB, CDP, IIRC, and CDSB all use process-focused verifications. Content-focused verification has been proven to be more robust as it aims to improve data quality and substance. According to Darnall et al., (2022) content-focused verification generated greater information disclosure among Japanese firms. It has also been documented that these publish 23% more content in their ESG reporting. The study draws on the idea that ESG reporting and standards need to focus more on content-focused verification than process-focused verification to stimulate companies to disclose more data that will ultimately lead to higher sustainability. This has major implications for the effects of EU ESG regulatory framework implementation. As the EU taxonomy focuses on clear criteria to distinguish sustainable activities, it can lead to a more robust disclosure among companies operating in the European market.

3.5. Materiality

Companies use the materiality assessment to filter in data that is relevant to the company, and which supports stakeholder and strategic decision-making. From this aspect, materiality does not have a clear definition and has led to multiple interpretations when dealing with disclosure reporting in various organizations. For example, GRI gives a different interpretation of the term, in the sense that it is more focused on stakeholders rather than investors. GRI questions what material impact has the reporting company on its external environment. However, it does not provide guidelines on how to assess this materiality but rather leaves it to the willingness of the reporting company to define its specific methodology. On the other spectrum, SASB standards regard materiality as a sustainability issue that can have an impact on the financial performance and position of the company. Both standards discussed above use the so-called “impact materiality” which considers the impact that activities may have on the environment in the short, medium, or long term. This includes the impacts of the organization on the upstream or downstream of its value chain (ESRG, 2022). As it concerns IIRC, materiality needs to be reported based on those activities that “substantively affect the organization’s ability to create value over time” (IIRC, 2013). Their disclosure also focuses on impact materiality as GRI and SASB.

The concept of ‘double-materiality’ was first coined by the European Commission (European Commission, 2019) in Guidelines on Non-financial Reporting: Supplement on Reporting Climate-related Information. In this sense, materiality needs to be understood from two angles: (1) development and performance that determine the values of the company and (2) the impacts on stakeholders that a company can have related to social and environmental domains. By this token, the European Financial Reporting Advisory Group (EFRAG) defines double materiality as “financial materiality” and “impact materiality”. This reflects on the EU ESG regulatory framework put in place in the last years and it will be binding for companies operating in the EU. The EU taxonomy adopts a “double materiality” concept which demands that a company assesses its activities that help meet the objectives laid down in the regulation but also that it does no significant harm to the other. In essence, companies need to screen their activities not only inside-out to evaluate their impact on the environment but also outside-in to cater their long-term strategy to include climate change challenges. Companies need to have a double view of their data and indicators. Additionally, the CSRD follows a double

materiality concept focusing not only on reporting financial data but also on the social and environmental impact of the company's activities.

4. Conclusions and Recommendations

This paper explores past and present challenges of EU sustainability reporting framework. Moreover, it examines the directions of European ESG regulatory framework development in order to achieve the climate and sustainable development targets. It is worth mentioning that at the global level there are two opposite forces that hamper the sustainable development of nations: on one hand there is a conflict between various international "actors" (regulators) to maintain their influence and technical superiority in the contested regulatory area where the expertise hegemony is unacceptable; on the other hand, there are nation's commitments and desire towards climate change for 2030 and 2050. These conflicting forces generate some drawbacks of having different ESG regulatory frameworks and initiatives:

1. There is no consistency between different non-financial reporting frameworks in preparing the information for the stakeholders (e.g., financial stakeholders vs multiple stakeholders vs non-financial stakeholders).
2. Different formats of sustainability reports; stand-alone reports vs integrating reports bring the following specifics:
 - More time flexibility and granularity in providing independent ESG reporting
 - Difficulties for stakeholders to identify the value impact of sustainability risks in the financial statements
 - Integrated approach in preparing the ESG reports, and accountability from Board members for both financial and ESG performance (also these reports are one stop shop).
 - Higher costs of compliance, difficulties to understand the combined financial and ESG information, and less flexibility in preparing the reports.
3. Sustainability reporting driven by financial materiality and promoted by, for example, the accountancy community through (e.g., IFRS Foundation) might have an insignificant or negative impact on sustainable development.
4. Different scopes driven by IFRS Foundation and European Financial Reporting Advisory Group EFRAG show resistance and a lack of desire for harmonization in ESG reporting. EFRAG has an interest to drive sustainability through impact change in a "framework" of dynamic materiality while IFRS Foundation is interested mainly to protect investors by focusing on enterprise value creation and less importantly the disclosure of impact materiality aspects.
5. In this turbulent and unclear regulatory development direction there are disadvantages: the high cost of compliance, and sustainable development is slowing down.
6. As ESG is an important non-financial driver for corporate value creation and corporate performance, non harmonized regulatory framework might have a negative impact on capturing and monitoring the corporate ESG performance (mostly quantified through ESG indexes). There is a growing academic literature that provides evidence of divergences and inconsistencies between

ESG ratings (e.g., Berg et al., 2019, show that the correlation between ESG raters ranges between 0.42 and 0.73).

7. Because of the legislative power of EFRAG and the backing of the European Commission there is a significant concern that the sustainability (ESG) regulatory process is hampered by the political interferences: (e.g., various political decisions, power interplay, and influences that may occur behind the scenes).
8. By having different approaches towards non-financial/sustainability reporting the risk for greenwashing is increasing fact that negatively influences the investment decision making process in the sustainable development projects and Initiatives.

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AN OVERVIEW OF ROMANIAN ACCOUNTANTS REGARDING THE INTRODUCTION OF HUMAN CAPITAL IN FINANCIAL STATEMENTS

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Abstract: *Human capital is an indispensable element that strongly contributes to the success and performance of organizations, being considered the most valuable resource of companies. This study aims to bring to the fore the development of human capital and, at the same time, to identify the position of accounting experts regarding the quantification of human capital and how this measurement can contribute to obtaining a more accurate and faithful picture of the financial position of the company. Therefore, to achieve these objectives, a survey was created that was distributed to the members of the Body of Expert and Licensed Accountants of Romania (C.E.C.C.A.R.), thus obtaining a number of 139 responses. The results show that 122 of the respondents consider it necessary to quantify human capital to present the company's image in a more accurate and realistic way. At the same time, 80 of these respondents do not consider that, once human capital is measured, it should be included in the financial statements, respectively in the balance sheet. This paper can provide an updated picture of the point of view of accounting professionals who have participated in the research on human capital, but also a starting point for the future steps of entrepreneurs in terms of human capital development, outlining new directions of development of professionals in the field. Also, this paper may be of interest to the institutions that regulate the relevant professions in the financial-accounting field, to outline new directions in the measurement and evaluation of human capital.*

Keywords: human capital development, human capital quantification, human capital in financial statements, human capital measurement challenges.

JEL classification: J24, O15, M41

1. Introduction

The concept of human capital encompasses a wide range of human attributes such as knowledge, skill sets, personality traits, attitudes, and values, as well as other characteristics developed through education and personal experiences that can lead to performance and productivity in the workplace (Armstrong and Shimizu, 2007; Backman et al., 2016; Becker, 1994; Debrah et al., 2017; Pennings et al., 1998; Lenihan et al., 2019).

According to Kotler (2011), for a company to be sustainable, radical changes are needed in all company departments. Companies must implement sustainability practices to achieve synergistic effects and maximize revenues (Jianu, Țurlea and Gușatu, 2015), and this can only be achieved through the experience and knowledge provided by human capital.

Jianu, Țurlea and Gușatu (2015) believed that the sustainable business must have a structure (based, among others, on marketing and sustainability reporting) and tools to assess the impact of structure on company's performance.

Ratti (2012) points out that, to a large extent, the success of any company depends on the quality of the people who work in it. In other words, human capital is the most important resource and the greatest asset a company can have. All activities and processes of the organization are operated by human capital, and this fact demonstrates the importance of human resources in the existence and development of companies. Therefore, the quantification of human capital is a necessity in building a realistic and faithful picture of the resources available to a company, and information related to the evaluation of human capital should be provided to management, investors, and other interested actors by including them in the financial statements or in accounting reports.

2. Literature Review

2.1. Human Capital Quantification In Accounting

Over time, researchers have proposed various methods to measure human capital in accounting. Among the most important according to Abudu, Valogo and Chilala (2018), we mention:

The Lev and Schwartz model

According to this model, the value of the human capital embodied in a person who is "y" years old is the present value of his future labor earnings and can be calculated using the following formula:

$$E(V_y) = \sum_{t=y}^T \frac{P_y(t+1) \sum_{l=1}^T I_l(t)}{(1+R)^{t-y}}$$

Where,

$E(V_y)$ = the expected value of the human capital of a person of age "y"

T = retirement age of the person

$P_y(t)$ = the probability that the person will leave the organization

$I_l(t)$ = the person's expected earnings in period l

r = discount rate

The Flamholtz Model - The historical cost of employing human capital

In the model suggested by Flamholtz (1999), the historical cost method consists in capitalizing all the costs associated with recruitment, selection, hiring and training and amortizing these costs over the projected life of the asset. This model suffers from many limitations. First, the economic value of an active man does not necessarily correspond to his historical cost. Again, any appreciation or depreciation may be subjective, unrelated to the increase or decrease in productivity of human assets. In addition, the costs associated with recruiting, selecting, hiring, training, placing, and developing employees may differ from one individual to another within a company.

Friedman and Lev Model

According to Friedman and Lev (1974), the value of human resources consists in the value of the reduced flow of wage differentials between the market and those perceived by the company, that is, the difference between what employees would have to be paid if the personnel policies were identical to those of a company in the industry they operate in and what they will actually be paid due to specific company policies.

Friedman and Lev's (1974) approach to measuring a firm's investment in human resources is based on generally accepted concepts of asset valuation, but goes beyond more common accounting practices by incorporating both present value and salvage value into the measurement process market.

In terms of accounting records, Friedman and Lev (1974) propose the existence of an "Investment in Human Resources" account, where the difference between external and internal human resources is recorded.

Hekimian și Jones Model

Hekimian and Jones (1967) proposed the opportunity cost method to overcome the limitations of the replacement cost method. These authors suggested that the value of human resources is determined through a bidding process within the company, based on the concept of opportunity cost. With this method, those in charge make a kind of offer to recruit the employees they need.

Several limitations arise regarding the use of the opportunity cost method. First, the inclusion of only those employees selected based on assets may be interpreted as discriminatory by other employees. Second, less profitable divisions may be punished for their incompetence. Third, the method may be judged artificial by those who disagree.

2.2. Challenges In Dealing With Human Capital

Arkan (2016), Gates (2002) and Akinsoyinu (1992) did not support the inclusion of human resources in financial statements. Among the reasons why they argued for this, but not limited to them, are:

- the human resource is a sensitive data of an organization and cannot be shared externally;
- measurement is not a priority for the company. This is because entities are interested in how to use human resources to improve performance, not measurement;
- insufficient time and resources;
- HR professionals who do not know about the value or do not have a clear picture of the investment;
- standard setters and other regulatory bodies have not covered it to make it a requirement for international financial reporting purposes;
- global and group problems.

According to Abudu, Valogo and Chilala (2018), different countries have different labor laws, which means that human resources are treated differently in terms of job evaluation, job placement, remuneration and retirement plans. This means that the harmonization of international accounting standards would create a problem.

Abudu, Valogo and Chilala (2018) pointed out some aspects regarding the opinions of other researchers about the quantification of human capital:

- Kenneth and Srinivas (2004) classified human resource as a contingent asset and the challenge of this asset is that it cannot be completely liquidated in a short period because there is no active market where they can transfer their skills for a fee. Another challenge is the issue of measurement (Haddad, 2014).
- Other researchers believed that including human resources in financial statements would dehumanize people and treat them like machines. It will also distort the measurement of return on investment (Alnasser, Shaban & Atieh, 2014).
- Oseni and Igbinosa (2015) suggest that even if human resources are to be included in the financial statements, there should be a separate report on human capital that would provide statistics and other facts about a company's level of human capital. A balance sheet of a company experiencing a high turnover rate the labor force would be unstable if the human resource is reported as an asset, this having decisional implications.

As a result, it is of interest what professional accountants in Romania think about this subject.

3. Methodology

The main purpose of this research is to bring to the fore the development of human capital and at the same time to identify the position of accounting experts regarding the quantification of human capital and how this measurement can contribute to obtaining a more correct and accurate picture. faithful to the financial position of the company. Therefore, a form that can contain a maximum number of 32 questions relevant to this research was sent for completion.

4. Data

The population to which this form was sent consists of members of the C.E.C.C.A.R. with legal personality, whose professional visa for the current year (2022) is valid, excluding freelancers and affiliated members whose email addresses are not found in the Members Table, available on www.ceccar.ro. Therefore, a sample size includes 2,177 C.E.C.C.A.R. members. Among them, only 139 respondents with at least the qualification of accountant participated by filling out the form. 112 companies had incorrect or missing email address. Microsoft Office - Excel was used for data processing, analysis, and discussion.

5. Results

Among the 139 respondents, only 4 graduated as their last form of education, the high school cycle, but they hold the quality of expert accountant conferred by CECCAR. he remaining 135 respondents are graduates with higher education (48 respondents – university bachelor studies, 57 respondents – university master's studies, 3 respondents – MBA program, 7 respondents – university doctorate studies, 20 respondents – postgraduate studies).

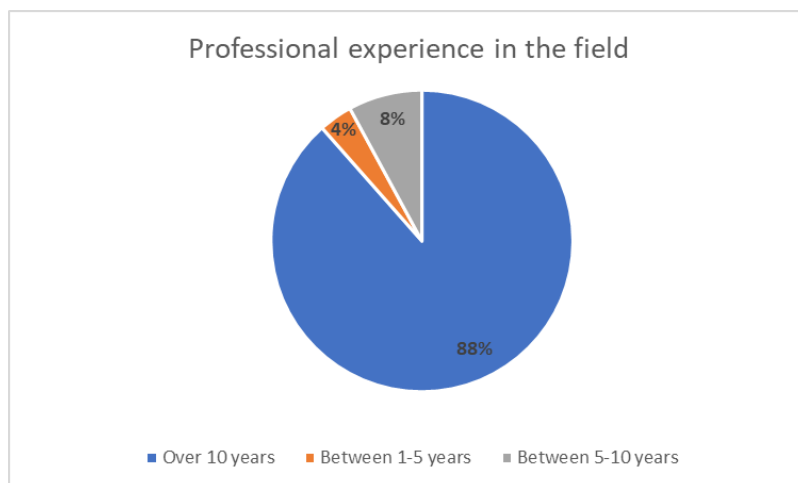


Figure 1: Professional experience in the field

Source: Own elaboration

As can be seen in the Figure 1, the respondents are professionals with rich experience in the field, the professional reasoning being developed through the prism of the experience acquired throughout the activity, but also through the courses completed and the professional qualifications obtained. Also, 111 of the respondents only hold the title of expert accountant, while the other 28 hold at least one other professional qualification:



Figure 2: Professional qualification held

Source: Own elaboration

Where:

CECCAR – The Body of Expert and Licensed Accountants of Romania

CAFR – The Chamber of Financial Auditors of Romania

CCF – The Romanian Chamber of Fiscal Consultants

ASPAAS – The Authority for Public Supervision of the Statutory Audit Activity

ANEVAR – The National Association of Authorized Romanian Valuers
UNPIR – The Romanian National Association of Practitioners in Insolvency,
represents the name of the institutions from which the professional qualification
was obtained.

When asked how they would define the concept of human capital based on experience and professional judgment, most respondents believe that it is the sum of knowledge, skills, experiences, and social qualities that contribute to a person's ability to perform work in a way that produces economic value for the entity in which it operates. Key words appear such as: indispensable, the key to success, the most important resource of an entity, continuous professional development and training, team, the source of achieving objectives. Also, the respondents believe that the development of companies depends closely on the quality of human capital, being an indispensable resource and able to be categorized as a separate category of investments, especially in the case of service companies. To the question related to the importance of human capital in the operation and development of a business, scores were given starting from 0, meaning not at all important, to 10, meaning that this resource is very important for the company. 96 out of 139 respondents answered with maximum points, considering that it occupies a very important role in business.

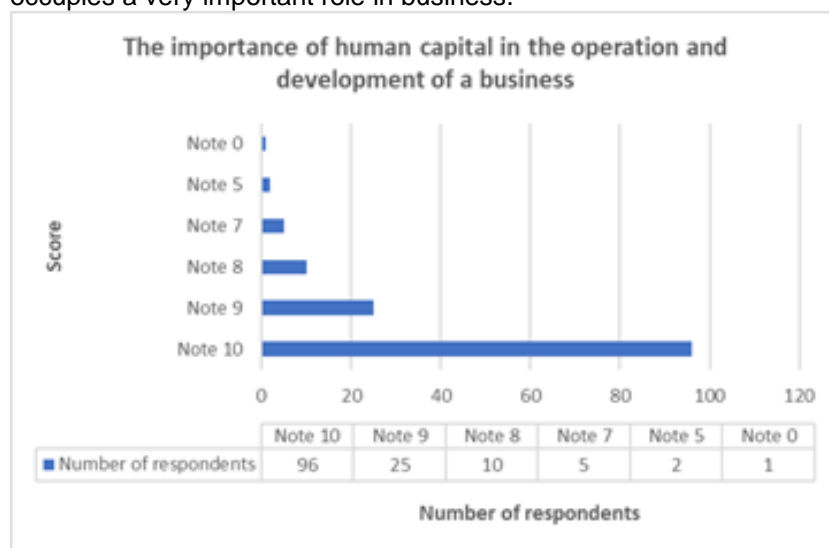


Figure 3: The importance of human capital in the operation and development of a business

Source: Own elaboration

Referring to the professional development of the respondents, 94% of them are of the opinion that continuous professional development is very important for the activity they carry out, and the responsibility for the level of professional training rests with both the respondents and the companies (66%). A percentage of 34% of respondents believe that the responsibility for their professional development rests only with them.

Among the skills considered necessary for the development of the activity of accounting professionals, we mention:

Table 1: Skills considered necessary for the accounting professionals

Required skills	Number of respondents
Programming skills	43
Time management skills	101
Teamwork	72
Predictive and prescriptive analytics	44
Descriptive analytics	23
Decision making skills	77
Negotiation skills	52

Source: Own elaboration

In addition to the skills listed above, the respondents believe that digital skills, managing relations with control bodies and clients, but also working under stress are topics of interest to them.

For future training programs, the subjects of interest to the respondents are:

Table 2: Future training programs

Topics of interest	Number of respondents
Social and environmental impact management	18
Development of social skills	36
Teamwork and collaboration	83
Development of professional knowledge	115
Data analysis	66

Source: Own elaboration

The quality of human capital influences the performance of companies. 88% of respondents believe that it is necessary to quantify this resource available to the company, in this case human capital, so that the image of the company is presented in a more faithful and realistic way.

We can see in the Figure 4, therefore, that this resource can generate future economic benefits for the company, benefits that could influence its image in one way or another.

Although 122 respondents believe that it is necessary to quantify human capital, only 42 of them are of the opinion that, once quantified, it should be presented in the financial statements, respectively in the balance sheet.



Figure 4: Human capital quantification

Source: Own elaboration

This result can also be caused by the lack of a way to measure human capital that is generally valid, in the same unitary way, for all companies.

Among the respondents who believe that this resource should be presented in the financial statements, 17 are of the opinion that the classification of human capital should be done in the form F30 – Informative data, 7 within the assets, 7 within the explanatory notes or annexes, 1 answer in equity, 1 answer in financial result, 1 answer in personnel data, more precisely in salary expenses, 1 in class 4, and 7 answers were invalid, as the situation is also presented in the table below:

Table 3: The inclusion of human capital in the balance sheet

In which section of the balance sheet would you see the introduction of this quantification of human capital relevant?	Number of respondents
Informative data - Form F30	17
Explanatory notes to the balance sheet and annexes	7
Assets	7
Own capital	1
Financial result	1
Personal data - Salary expenses	1
Class 4	1
Invalid response	7

Source: Own elaboration

6. Conclusions

After analysing these answers, it is confirmed once again the important and indispensable role that human capital has in the existence and development of companies, leading to the achievement of performance. Human capital can represent the main asset that a company has in front of its competitors, and investments in increasing the quality of this resource should not be neglected, because its quality can make the difference, leading to the creation of economic advantage.

Most of the accounting professionals who participated in the research believe that the responsibility for their professional development rests with them as well as with the company in which they work. As a result, companies must support this approach, to the benefit of both parties, by thinking about and making available to employees plans for training courses that they can participate in. Considering that the last period was strongly affected by the health crisis caused by the spread of the SARS-CoV-2 virus, the support from the company in such efforts can be very important.

Also, the research results show us the desire of professionals in the field to measure human capital in order to provide the most accurate picture of the resources available to the company, but most are convinced that this measurement of human capital should not be included in the financial statements, respectively in the balance sheet of the company, because there is no clear way to achieve this and in the same uniform way in all companies.

For the other category of respondents who want the inclusion of human capital assessment in accounting, the answers are divided regarding the section in which this quantification should be included. Most of them are of the opinion that it should be detailed in the Form F30 – Informative data, together with other information on human capital, such as: information on the professional training of employees, but also of managers, so that interested actors have information available about the management of the company, the level of training and qualification of both them and the employees. This is quite difficult to achieve because human capital is a sensitive resource for the company.

So, until a universally valid method of quantifying human capital is established, it is difficult to talk about its evaluation in a unified way, so that the data on this resource of companies can be compared with each other.

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ETHICS IN THE ROMANIAN ACCOUNTING PROFESSION. A GENDER AND RELIGION COMPARATIVE STUDY

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Abstract: *The goal of this paper is to better comprehend the importance of ethical behavior related to gender and religion in the Romanian accounting profession. In this regard we started by reviewing the scientific papers approaching the ethics topic of research. Then we conducted an empirical study that analyses students' behavior when dealing with ethics in accounting field, having as main objective the assessment of the students' perceptions regarding the importance of the ethical behavior, as potential or current employees in the field of accounting. The empirical research was carried out between May 2022 and June 2022, and the research method used was the survey, the instrument used being the questionnaire. This has been fulfilled by 100 master students in the accounting field from the Faculties of Economics, within the University of Oradea as well as the University of Arad. This paper is going to validate the different importance given to ethical behavior, by accounting professionals in Romania depending on gender. The research questions that this study aims to answer are: Does the accountants' gender influence the ethical behavior of the accounting profession? And Does the accountants' religious background influence their sense of ethics? Results obtained document a different level of given significance to ethical behavior depending on gender, but not on religious background. A significant part of those surveyed considers that under pressure or salary motivation from the management of the entity, they could decide to change an accounting policy that could affect the true image of the company.*

Keywords: students, accountants, ethical behavior, ethics, religion, gender

JEL Classification: M41, M14, Z12

1.Introduction

The concern regarding ethical issues has increased in higher education, especially in the accounting field of study. Despite of the significance that business ethics has lately generated in the academic community the current and relevant field has not been given the attention it really deserves.

By its very nature, the field of accounting is closely related to ethics, morality, and religion. There is a close connection between the concepts of ethics, religion, and morality, being able to identify in their case an association.

We asked ourselves rhetorically: how many financial scandals, bankruptcies and human dramas could have been avoided if there had been at least a shred of morality?

In our daily life all over the world, but perhaps especially in our country, we need to return to the healthy values that we consider to be found only in the moral and spiritual space.

Among the issues addressed in the education debate, the topic of effective teaching of ethics to accounting students stands out (Dellaportas et al., 2006; Williams & Elson, 2010; Boland, G., & Sugahara, S. 2011). Another concern is circumscribed to the following questions: What is the most suitable way of teaching ethics? Should it be taught in different accounting courses or rather in a stand-alone ethics course?

Which option could bring more advantages for students? Therefore, we consider it relevant to investigate whether the ethics course has long-term effects on moral reasoning or whether the advantages – if any – are just transitory.

2.Literature review

Ethical aspects of the accounting profession have already been scientifically studied over the years. Those studies assessed mostly the nature and extent of ethical problems. Table 1 summarizes the research that relates ethical items to the accounting profession, gender, and religion.

Table 1. Studies related to ethical items.

Issues	Authors, Year of publication	Findings
Ethical items related to accountant's profession	Casado-Belmonte, M.P., et al. (2019)	Spanish students regard ethical issues as relevant to be taught in higher education. What's more, they are prone to enroll in courses teaching ethics.
	Namazi, M. and Rajabdorri, H. (2019)	Ethics is underpinned by four major constructs: personal, social, economic-organizational, and environmental factors. According to the authors, all four above constructs are interconnected and affect professional ethics in accounting.
	Christensen, A., Cote, J. & Latham, C.K. (2018)	Taking into account the advantages of GVV, the members of the faculty should consider it to be usefull in accounting ethics education

Issues	Authors, Year of publication	Findings
	Bobek, D. D. Et al. (2017)	The authors documented that ethical decision-making is environment-dependent. In this respect, accounting professionals working in public accounting firms regard their environment as being more ethical. The results of the study documents also that Big 4 firms Perceive their environment as being more ethical compared to non-Big 4 firms.
	Zhatkin, Y. et al. (2017)	Although accounting professionals in Ukraine seem to know the Code of Ethics very well, a study conducted both within public and private companies at this country, reveals the fact that the opinion of the respondents indicates a low level of ethics.
	Tormo, G. et al. (2014)	Spanish students are having different views regarding the importance of ethics goals in accounting education according to their attendance to ethics courses.
	Radtke, R. R. (2008).	A study representing the first survey on the ethics of roles in accounting, including survey data from three samples of professionals: accountants, doctors, and lawyers have documented that accountants generally do not agree that role morality is acceptable. Furthermore, compared to the group of doctors and lawyers, doctors agree the least on the morality of the role, whereas lawyers agree the most.
Ethical items related to gender	Khlif, H. and Achek, I. (2017)	The study shows that the presence of women on the board, audit committee, CFO or CEO has as a consequence a more conservative reporting as well as a higher level of social and environmental disclosure. In this sense, the quality of the audit is also influenced. Thus, an increased probability of issuing a negative audit opinion as well as a higher level of audit fees can be seen.

Issues	Authors, Year of publication	Findings
	Ismail,H. (2015)	The study shows that companies should develop their ethics training programs especially for men, taking into account the fact that they seem to pay more attention to masculinity to the detriment of ethical behavior.
	Ho, S.S.M., Li, A.Y., Tam, K. et al (2015)	The results of the study documented a positive association between the gender of the CEO and accounting conservatism. Also, the results documents that this association seems to be stronger in firms where the risk of litigation is higher compared to those with a lower risk of litigation.
	Krambia-Kapardis, M & Zopiatis, A (2011)	The study examined the character and personal values of accountants using the Maccoby Head/Heart instrument in Cyprus. According to their results no gender differences were found as accountants inclined more to "Head" compared to "Heart" traits.
	Venezia, C. C. (2008)	A USA-Taiwan comparative study reveals that there is a difference in ethical reasoning between male and female accounting students. More precisely, women are the ones who show a clearly superior ethical behavior to men in this field.
Ethical items related to religion	Al-Ebel, A., et al. (2020)	Religious and accounting expertise of top leaders are associated with abnormal decrease in audit report lag and that Big4 audit firms interact with the religiosity and accounting expertise of the AC chair more than the CEO.
	Montenegro, T.M., Rodrigues, L.L. (2020)	There is no significant relationship between religiosity and the professional judgment of professional accountants in Portugal regarding earnings management. Also, religious values seem to impact manipulative behavior in a weaker legal environment.
	Al-Ebel, A.et al.(2020)	REM practices can be negatively impacted by religious beliefs and the expertise of the manager.

Issues	Authors, Year of publication	Findings
	Bosinceanu,A. (2019)	In certain cultural and geographical settings religion might be bad for the bank account and less religion might mean more money, which can have an impact on consumption since more money is available for spending.
	Permatasari,Y& Surayya,Z.A. (2019)	A study carried out on a sample of 118 students demonstrates that religiosity has a moderating effect on the relationship between gender and ethical perception, which cannot be said about its effect on the love of money
	Helmy, H. (2018)	Ethical orientation idealism has a significant positive influence on ethical judgment. In the other hand, relativism and religiosity has no significant influence on ethical judgment. There is no significant difference in ethical judgments between students with high and low degree of religiosity.
	Montenegro, T.M. (2017)	Lower level of earnings management was documented in firms with headquarters in areas with a high influence of religion, documenting that religion can have an impact on ethical behaviors of firms.

Source: own elaboration based on literature review

3.Research methodology

The main objective of the research is to study the perception of the ethical behavior of accounting masters students, as current/potential employees. The target group consists of 50 master's students from the Faculty of Economic Sciences of the "Aurel Vlaicu" University from Arad and 50 master's students from the Faculty of Economic Sciences of the University of Oradea. Of these, 62 are women (group 1) and 38 are men (group 2). In order to achieve this objective, an exploratory study was carried out, based on a cross-sectional descriptive research, the research method used being the survey, the research tool being the questionnaire. Thus, a questionnaire was elaborated, that includes two categories of questions: general questions, their role being to provide a faithful image as possible regarding the personal profile of the target group, as well as questions regarding the perception of the target group vis-à-vis the aspects regarding ethics, following their differentiation according to gender, but also according to their religious background. The questionnaire was distributed between May and June 2022 and it constitutes the basis for substantiating the scientific approach.

The material proposes two dynamically transposed objectives by testing some research hypotheses presented in detail in the following paragraph.

Objective 1. Identifying the ethical behavior of master's students according to gender

Objective 2. Identifying the ethical behavior of master's students according to their religious background

In order to test the research hypotheses, Karl Pearson's chi-squared test was used as well as the rank-ordering method

4.Data analysis

In order to achieve the first objective, we proposed to analyze the following aspects:

Identifying the opinions of the respondents from the two target groups regarding the ways to solve the ethical problems that future professional accountants might face during their professional activity.

Within this analyzed aspect, we propose to test the following hypothesis:

Hypothesis H1: There is a difference in perception between the two target groups regarding the aspect presented above.

The target group was asked to rank the four ways of solving ethical problems. In order to achieve this goal, we will use the rank-ordering method in a qualitative research, with the objective of evaluating the four ways of solving problems from the point of view of the importance attributed to them, as well as processing the answers of a sample of 100 master's students, of which 62 are women and 38 are men.

Hypothesis H0: There is no difference in perception between the two target groups regarding the aspect presented above.

The ranking of these methods will be carried out by the investigated subjects from the point of view of the importance they give. Tables 2 and 3 show the number of interviewed students who place each method according to the importance given to them. Each survey subject was asked to rate the four modalities with qualifiers on a scale from 1-most important to 4-least important, depending on where he placed them in terms of preferences.

Table 2. The ordering of the preferences of master's students belonging to group 1

Modalities/scoring	Place 1 4 points	Place 2 3 points	Place 3 2 points	Place 4 1 point
M1	47	11	3	1
M2	10	45	6	1
M3	4	5	52	1
M4	1	1	1	59

Source: own elaboration based on answers from questionnaires

Legenda:

M1- consultation with the employer

M2- consultation with colleagues

M3- consultation with family and friends

M4- total lack of communication on this topic

The hierarchy of each method will be determined by weighting the number of assessments of each skill with the score given to the place where it was assessed, as follows:

$$M1=47 \times 4+11 \times 3+3 \times 2+1 \times 1=228$$

$$M2=10 \times 4+45 \times 3+6 \times 2+1 \times 1=188$$

$$M3=4 \times 4+5 \times 3+52 \times 2+1 \times 1=136$$

$$M4=1 \times 4+1 \times 3+1 \times 1+59 \times 1=67$$

The final hierarchy of the four modalities in terms of preferences of the 62 investigated subjects is:

$$M1(228)>M2(188)>M3(136)>M4(67)$$

Table 3:The ordering of the preferences of master's students belonging to group 2

Modalities/scoring	Place 1 4 points	Place 2 3 points	Place 3 2 points	Place 4 1 point
M1	7	28	2	1
M2	26	8	3	1
M3	4	1	31	2
M4	1	1	2	34

Source: own elaboration based on answers from questionnaires

$$M1=7 \times 4+28 \times 3+2 \times 2+1 \times 1=120$$

$$M2=26 \times 4+8 \times 3+3 \times 2+1 \times 1=135$$

$$M3=4 \times 4+1 \times 3+31 \times 2+2 \times 1=83$$

$$M4=1 \times 4+1 \times 3+2 \times 1+34 \times 1=43$$

The final hierarchy of the four modalities in terms of preferences of the 62 investigated subjects is:

$$M2(135)>M1(120)>M3(83)>M4(43)$$

The null hypothesis is rejected, and as a result, the alternative hypothesis is accepted. As a result, there is a difference in perception between the two groups regarding the ways of solving ethical problems that future professional accountants might face during their professional activity .

Identifying the opinion of the two groups (group 1 and 2) regarding the use of an accounting policy in the course of professional activity that is contrary to the true image but favourable to the image of the company

Within this analyzed aspect, we propose to test the following hypothesis:

Hypothesis H1: There is a difference in perception between the two target groups regarding the aspect presented above. The two target groups were asked to answer the question: "Under pressure from the manager, would you apply an

accounting policy contrary to the faithful image, but favorable to the image of the enterprise?"

Hypothesis H0: There is no difference in perception between the two target groups regarding the aspect presented above.

In order to test the hypothesis, we will use the chi-square test (Karl Pearson).

Decision criteria:

Significance threshold: $\alpha=0.05$

Number of degrees of freedom:

$df=(\text{no. columns}-1)\times(\text{no. rows}-1)=(5-1)\times(2-1)=4$

Table 4. Observed and theoretical frequencies

Observed/ Theoretical	Totally disagree	Disagree	Indifferent	Agree	Totally agree	Total
Group 1	40/33	10/10	7/6	3/9	2/4	62/62
Group 2	25/20	6/6	3/4	2/5	2/3	38/38
Total	65	16	10	5	4	100/100

Source: own elaboration based on the answers from the questionnaires

Calculation of the observed value of the parameter:

$\chi^2_{\text{calculating}}=(40-40)^2/40+(10-10)^2/10+(7-6)^2/6+(3-3)^2/3+(2-3)^2/3+(25-25)^2/25+(6-6)^2/6+(3-4)^2/4+(2-2)^2/2+(2-1)^2/1=1,16$

$\chi^2_{\text{critical}}=9,488$ Luarea deciziei: $\chi^2_{\text{calculating}} < \chi^2_{\text{critical}}$.

The null hypothesis is accepted, and as a result, the alternative hypothesis is not accepted. As a result, there is no difference in perception between the two groups regarding the use by accountants during their professional activity of an accounting policy contrary to the faithful image but favorable to the image of the company.

Identifying the opinion of the two groups (group 1 and 2), regarding the placement of the discipline of ethics within the university curriculum.

Within this analyzed aspect, we propose to test the following hypothesis:

Hypothesis H1: There is a difference in perception between the two target groups regarding the aspect presented above. The two target groups were asked to answer the question: "Do you consider it necessary that it would be better for the discipline of ethics to be incorporated into within accounting courses, rather than being placed as distinct in the curriculum?"

Hypothesis H0: There is no difference in perception between the two target groups regarding the aspect presented above.

In order to test the hypothesis, we will use the chi-square test (Karl Pearson).

Decision criteria:

Significance threshold: $\alpha=0.05$

Number of degrees of freedom:

$df=(\text{no. columns}-1)\times(\text{no. rows}-1)=(5-1)\times(2-1)=4$

Table 5. Observed and theoretical frequencies

Observed/ Theoretical	Totally disagree	Disagree	Indifferent	Agree	Totally agree	Total
Group 1	3/3	4/4	5/5	10/13	40/37	62/62
Group 2	2/2	3/3	3/3	11/8	19/22	38/38
Total	5/5	7/7	8/8	21/21	59/59	100/100

Source: own elaboration based on the answers from the questionnaires

Calculation of the observed value of the parameter:

$$\chi^2_{\text{calculating}} = (3-3)^2/3 + (4-4)^2/4 + (5-5)^2/5 + (10-13)^2/13 + (40-37)^2/37 + (2-2)^2/2 + (3-3)^2/3 + (3-3)^2/3 + (11-8)^2/8 + (19-22)^2/22 = 2,46$$

$$\chi^2_{\text{critical}} = 9,488 \text{ Making the decision: } \chi^2_{\text{calculating}} < \chi^2_{\text{critical}}$$

The null hypothesis is accepted, and as a result, the alternative hypothesis is rejected. As a result, there is no difference in perception between the two groups regarding the placement of the discipline of ethics within the university curriculum, in the sense that it should be incorporated within the disciplines of accounting and not as a distinct subject in the university curriculum.

In order to achieve the second objective, we proposed to analyze the following aspect:

Identifying the opinions of the two groups (group 1 and 2) regarding the existence of the religious background on the ethical behavior of current/potential accounting professionals.

Within this analyzed aspect, we propose to test the following hypothesis:

Hypothesis H1: There is a difference in perception between the two target groups, regarding the aspect presented above. The two target groups were asked to answer the question: "Do you consider the ethical behavior of the current/potential employee to be influenced by religious values?"

Null hypothesis H0: There is no difference in perception between the two target groups regarding the aspect presented above.

In order to test the hypothesis, we will use the chi-square test (Karl Pearson).

Decision criteria:

Significance threshold: $\alpha = 0.05$

Number of degrees of freedom:

$$df = (\text{no. columns} - 1) \times (\text{no. rows} - 1) = (5 - 1) \times (2 - 1) = 4$$

Table 6. Observed and theoretical frequencies

Observed/ Theoretical	Totally disagree	Disagree	Indifferent	Agree	Totally agree	Total
Group 1	2/2	4/4	5/17	10/10	41/29	62/62
Group 2	2/2	3/3	22/10	6/6	5/17	38/38

Observed/ Theoretical	Totally disagree	Disagree	Indifferent	Agree	Totally agree	Total
Total	4/4	7/7	27/27	16/16	46/46	100/100

Source: own elaboration based on the answers from the questionnaires

Calculation of the observed value of the parameter:

$$\chi^2_{\text{calculating}} = (2-2)^2/2 + (4-4)^2/4 + (5-17)^2/17 + (10-10)^2/10 + (41-29)^2/29 + (2-2)^2/2 + (3-3)^2/3 + (22-27)^2/27 + (6-6)^2/6 + (5-17)^2/17 = 21,90$$

$$\chi^2_{\text{critical}} = 9,488 \text{ Luarea deciziei: } \chi^2_{\text{calculating}} > \chi^2_{\text{critical}}$$

The null hypothesis is rejected, and as a result the alternative hypothesis is accepted. As a result, there is a difference in perception between the two groups regarding the influence of religious background on the ethical behavior of current/potential accounting professionals.

5. Conclusions

In the situation where we analyze an ethical problem, we need a compass with the help of which to orient ourselves in finding an answer to a series of questions: What should we do? What are we allowed to do? Of course there are more solutions that we use in our everyday life. We usually appeal to our own intuition, approving or disapproving of behaviors, or to the authority of the rules that we have learned since childhood from parents, grandparents, priests, teachers, etc. But what happens when a professional accountant is in this situation at work? What is his compass? Are there differences in perception regarding the resolution of these dilemmas between women and men? To what extent is their ethical behavior influenced by religious values? These are some of the questions we tried to answer in this work through the study undertaken in the Romanian academic environment. In this sense, the main results of our study start from the testing of the first research hypothesis that is validated, which means that among the accounting students interviewed there is a difference in perception according to gender regarding the ways of solving ethical problems that would be possible to face the future professional accountants during the course of their professional activity. Therefore, we mention that in the top of the preferences for solving ethical problems by the students in the sample we find consultation with the employer (women place it in the first place while men in the second place) and consultation with colleagues (men place it in the first place and women in the second place) 2). In conclusion, there is a difference in perception between women and men regarding this subject.

Starting from a research carried out in the Japanese academic environment by Boland, G., & Sugahara, S. (2011), another aspect that we addressed in the paper refers to the importance of teaching ethics within the university curriculum. The results of our study reveal the fact that around 80% of the interviewed students believe that this should be achieved by including ethical aspects in accounting courses, while the others consider it appropriate that they be treated in a separate course.

A final aspect that we considered in this study refers to the differentiation of opinion according to gender on the foundation of the ethical behavior of students as current/potential employees on religious issues. The results of the study show that 82.25% of the women interviewed consider that aspects of religiosity are the basis of their ethical behavior, and 57.89% of the men respond indifferently to the question. As a result there is a difference in perception between the two groups regarding the influence of religious background on the ethical behavior of current/potential accounting professionals.

The main limitation of our research is the size of the sample, which does not allow us to extrapolate the results to the level of our country, but the possible studies that will follow on this topic will certainly be welcome in this sense.

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UNETHICAL BEHAVIOR: A MULTIDISCIPLINARY REVIEW OF THE HIGHLY CITED PAPERS

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Abstract:

Our multidisciplinary review paper aims to explore the research paradigms of *unethical behavior from different academic perspectives*. By doing this, our paper contributes to a better understanding of unethical behavior by drawing knowledge from alternative understandings of such behavior. More specifically, our multidisciplinary inquiry aims to summarize the main findings documented by scholars from different disciplines that conducted independent research on the topic using unique perspectives and ideas associated with the field. As such, in order to gain a better understanding of how unethical behavior is examined through a range of different disciplines and areas of research we assessed the highly cited papers found at the intersection of various categories and research areas such as management, business economics, and psychology, ethics, engineering, and environmental sciences and ecology, public environmental occupational health. Having the goal to offer the most representative research on the topic, we based our review on the highly cited papers examining unethical behavior from the Clarivate Analytics' Web of Science (WoS), the world's leading scientific citation search and analytical information platform. The results show that the highly cited papers analyzed cluster around two major research themes as antecedents and factors increasing/enabling unethical behavior (e.g. propensity of moral disengagement, psychological entitlement, self-serving justifications, job insecurity, air pollution, polluted social contexts, creativity, favorable attitudes of upper-class toward greed, etc.) and factors deterring or limiting it (e.g. religion, ethical leadership). Given our multidisciplinary review, our study helps provide alternative understandings and important insights on the research of unethical behavior to serve for novel investigations in both practice and theory.

Keywords: *unethical behavior; literature review; multidisciplinary approach.*

JEL Classification: *M40; M10; D91; D23*

1. Introduction

Current research documented that unethical behavior is becoming widespread (Shalvi et al., 2015) and as a result is frequently found in the practice field (Gachter and Schulz, 2016). Research on the topic has grown considerably over the years

and can be found in different areas such as management, economics, psychology, engineering, environmental sciences, social technology, and others. The interest of scholars in examining unethical behavior is related to its negative impact and consequences affecting the intrinsic honesty of individuals and societies (Gächter and Schulz, 2016), companies' reputation, and development (Lee et al., 2019). Nevertheless, given its negative impact, scholars were interested to identify the antecedents, factors, and psychological mechanisms and constructs that drive such practices. Once the mechanism is understood, limiting such negative behavior with severe consequences becomes a possibility.

Gerlach et al., (2019) argued that despite the growing number of papers assessing unethical behavior in recent years, the findings as to when individuals engage in such behavior are to some extent unclear and sometimes contradictory. For this reason, studies like ours can be useful to better understand the circumstances under which such negative behavior emerges and how we can limit it.

In order to achieve the above, we review the existing literature on unethical behavior from the perspective of the highly cited papers from the Web of Science database, taking a multidisciplinary path (Management, Business economics, Psychology, Environmental sciences, Ethics, Social technology, Business finance, Engineering, Engineering environmental, Operations research management science, Public environmental occupational health). As such, we were interested to summarize the main findings drawn from multidisciplinary research and assess the views of scholars from multiple disciplines and fields of research, what they considered relevant, and the main contributions brought in terms of unethical behavior.

Given the fact that we selected only highly cited papers to conduct our review, we were interested in the novelty and importance of the results documented to the point that their findings were considered so relevant by other scholars in their fields of research and others to cite them, until the point that analyzed papers became the most cited papers approaching unethical behavior from the Web of Science database.

By taking a multidisciplinary perspective and combining findings from all areas of research summarized above, we contribute to a more nuanced understanding of unethical behavior.

The rest of the paper is organized as follows. Section two summarizes our research methodology, while the next section approached the data analysis and discussion segment. The last section of our paper concludes.

2. Research methodology

In October 2022 we searched the WoS database (Keywords: unethical behavior) for prior studies approaching unethical behavior research topic. A total of 3.651 papers resulted. We further applied the "highly cited papers" quick filter and resulted in 19 articles, 2 review papers, and 1 book chapter ranging between 11 to 541 citations/paper. By using this particular quick filter we wanted to refine the search to the most representative papers in terms of the number of citations. After analyzing the papers, we excluded the ones with a marginal focus on unethical behavior and the final sample consisted of 15 scientific papers from different fields

of research such as management, business economics, psychology, ethics, engineering, environmental sciences, ecology, and public environmental occupational health.

As such we conducted a multidisciplinary review of the unethical behavior literature, aiming to summarize the novel and relevant insights coming from different disciplines and research areas. Given our goal, our research questions were the following:

RQ1: What is the focus of the highly cited papers from different areas of research approaching unethical behavior?

RQ2: What were the main findings documented by the scholars approaching unethical behavior across the different areas of research?

3. Data analysis and discussion

After obtaining the final sample of papers consisting as stated above 15 scientific papers we conducted further analysis in order to summarize their main findings, frequency of highly cited papers approaching unethical behavior per year, Web of Science categories that comprised the analyzed papers, main research areas, and publication titles. Table 1 below summarizes the publication titles as follows:

Table 1: Papers included in our sample

No.	Authors /year of publication	Publication Title
1	Elshaer and Azazz (2022)	International Journal of Environmental Research and Public Health
2	Lee et al., (2019)	Journal of Business Ethics
3	Moore et al., (2019)	Journal of Applied Psychology
4	Gerlach et al., (2019)	Psychological Bulletin
5	Lu et al., (2018)	Psychological Science
6	Edwards and Roy (2017)	Environmental Engineering Science
7	Gachter and Schulz (2016)	Nature
8	Blanken et al., (2015)	Personality and Social Psychology Bulletin
9	Shalvi et al., (2015)	Current Directions in Psychology Science
10	Charness et al., (2014)	Management Science
11	Gino and Ariely (2012)	Journal of Personality and Social Psychology
12	Mayer et al., (2012)	Academy of Management Journal
13	McGuire et al., (2012)	Accounting Review
14	Moore et al., (2012)	Personnel Psychology
15	Piff et al., (2012)	Proceedings of the National Academy of Sciences of the United States of America

Source: Authors' own contribution

As can be observed from Table 1 above, the distribution of papers approaching unethical behavior topic of research is constant over the years, from 2012 to the

present date, proving that the interest of scholars from multiple areas of research on the topic is maintained. Analyzing the journals where the above papers were published we can easily notice that in most cases we can identify top-tier journals from accounting (e.g. Accounting Review), psychology (e.g. Psychological Bulletin, Journal of Applied Psychology, Personnel Psychology, etc.), management (e.g. Academy of Management Journal), ethics (e.g. Journal of Business Ethics) or multidisciplinary (e.g. Nature being the most influential journal from this category). Overall, the large majority of the highly cited papers approaching unethical behavior were published by the most influential journals from different fields (organizational psychology, applied psychology, social psychology, business ethics, accounting, and management).

In terms of Web of Science categories and research areas table 2 summarizes the main findings as follows:

Table 2. Web of Science categories and research areas where the analyzed papers were published

No.	Categories/ Research areas	Number of papers for each category and authors
1	Management / Business Economics	4 (Moore et al., 2012; Moore et al., 2019; Charness et al., 2014; Mayer et al., 2012)
2	Psychology / Multidisciplinary / Psychology	4 (Lu et al., 2018; Gerlach et al., 2019; Shalvi et al., 2015)
3	Business / Business Economics	2 (Lee et al., 2019; Mayer et al., 2012)
4	Environmental Sciences / Environmental Science Ecology	2 (Elshaer and Azazz, 2022; Edwards and Roy, 2017)
5	Psychology Applied / Psychology	2 (Moore et al., 2012; Moore et al., 2019)
6	Ethics / Business Economics, Social Sciences other Topics	1 (Lee et al., 2019)
7	Multidisciplinary sciences/Social Technology other topics	2 (Piff et al., 2012; Gachter and Schulz, 2016)
8	Psychology / Psychology/ Multidisciplinary	1 (Gerlach et al., 2019)
9	Psychology social / Psychology	2 (Gino and Ariely, 2012; Blanken et al., 2015)
10	Business Finance / Business Economics	1 (McGuire et al., 2012)
11	Engineering Environmental / Engineering	1 (Edwards and Roy, 2017)
12	Operations Research Management Science / Operations Research	1 (Charness et al., 2014)

	Management Science	
13	Public Environmental Occupational Health / Public Environmental Occupational Health	1 (Elshaer and Azazz, 2022)
Total of papers		15

Source: Authors' own calculations

Among the WoS categories, we can mainly find management, psychology, business, business finance, and ethics but also multidisciplinary sciences and engineering. The research areas of Business Economics and Psychology are the most represented, comprising the large majority of the papers analyzed. Also, as can be noticed from the table above, some of the papers analyzed were published at the intersection of various WoS categories and research areas (e.g. Moore et al., 2012, 2019 or Charness et al., 2014).

Further, examining the focus of the highly cited papers analyzed that examined unethical behavior, we identified two directions: (a) antecedents and factors enabling/triggering unethical behavior (comprising both review papers and empirical ones) and, (b) factors limiting ethical behavior (empirical papers). Based on the above, we summarized the main findings documented by the analyzed papers in two clusters, as follows:

Cluster 1: antecedents and factors increasing/enabling unethical behavior/unethical organizational behavior / unethical pro-organizational behavior (papers: 12 papers: Moore et al., (2012); Piff et al., (2012); Gino and Ariely (2012); Charness et al., (2014); Blanke et al., (2015); Shalvi et al., (2015); Gächter and Schulz (2016); Edwards and Roy (2017); Lu et al., (2018); Gerlach et al., (2019); Lee et al., (2019); Elshaer and Azazz (2022)).

The empirical study conducted by Moore et al., (2012) was designed to identify antecedents of unethical organizational behavior. As such, using both laboratory and fieldwork, the authors were able to demonstrate that the propensity to moral disengage can predict various types of unethical organizational behavior. The importance of their empirical study relies on the fact that it seeks to understand what triggers unethical behavior in the workplace and further how it can be limited. The construct of the propensity to morally disengage is very important for both practice and theory given its potential to explain how dishonest behavior takes place inside organizations.

Piff et al., (2012) conducted seven studies using both experimental and naturalistic methods in order to assess whether a higher/lower social class predicts unethical behavior of individuals. Their empirical results documented overall that higher-class individuals might engage in morally unethical practices when compared to lower-class ones. The authors also documented that this relationship is moderated by favorable attitudes toward greed associated with upper-class individuals. The importance of their study for both theory and practice relies upon the documented results showing that belonging to a certain class can enable unethical behaviors.

Gino and Ariely (2012) argued that creativity and antisocial behaviors can enhance each other. To demonstrate the relationship between the two, they conducted five experiments. As a result, the authors found that unethical behavior can be triggered by the desire to obtain a better performance in divergent thinking where

cheating was found to be a creative choice used by the participants under the impression that their peers would do the same. Overall, the study conducted by Gino and Ariely (2012) offered empirical evidence that creative people tend to behave in a dishonest manner more than less creative ones given the fact that they possess the ability to justify such behavior. The importance of this empirical study relies on the fact that identifies creativity as having an important role in better explaining what triggers unethical behavior.

Charness et al., (2014) conducted an experiment examining the existence of unethical behavior in a specific setting where participants were paid to perform a task and found that ranking feedback motivates people to work harder proving that individuals care about their relative position and that social comparisons increase the motivation for work even in the absence of monetary incentives to outperform. Examining the behavior of leaders in terms of competition for status from a neuroeconomic perspective, the authors argued that the demand for status is overwhelming. According to their perspective and results, the desire to outperform their counterpart appears for intrinsic reasons such as raising their own status or dominance in the workplace. The importance of the study relies upon the fact that raising the own status can trigger unethical behavior.

Blanke et al., (2015) examined the literature approaching moral licensing (e.g. people that initially behave morally, later tend to behave unethically, immorally, or problematic) in order to contribute to a better understanding of this effect and documented an estimation of it. Despite the fact that it was smaller compared to other typical effects found in social psychology, the authors consider that its impact has the potential to create large societal implications and argue for further research on identifying when this phenomenon takes place and what triggers it. Given the results documented, the study contributes to the identification of important insights into individuals' behavior and motivations, while uncovering adverse consequences of such behaviors.

Shalvi et al., (2015) developed a framework focused on the role of self-serving justification taking place before and after moral violations, arguing that this construct enables individuals to do wrong while feeling moral. By identifying the psychological mechanisms enabling people to be dishonest while feeling moral, their novel framework has the potential to increase ethical conduct. Despite the effectiveness of this construct, the temporal dimension of it should be further assessed through future empirical studies.

Gächter and Schulz (2016) provided empirical evidence using cross-societal experiments from 23 countries around the world proving an important association between the prevalence of rule violations and intrinsic honesty. As such, the authors developed an Index of the Prevalence of Rule Violations based on country-level data comprising information about corruption, tax evasion, and fraudulent policies. Based on the Index of the Prevalence of Rule Violations the countries from their sample were split between low-index countries and high-index countries. In the cases with high values obtained according to the Index of the Prevalence of Rule Violations, rule violations had a high magnitude compared to the cases where the index disclosed low values. Intrinsic honesty was measured using an anonymous die-rolling experiment with 2568 participants. The findings document that intrinsic honesty is stronger in the low Index of the Prevalence of Rule Violations countries compared to high countries. Overall, the authors proved that

rule violations did not have only adverse economic consequences but also decrease individual honesty. The results documented by Gächter and Schulz (2016) are extremely important for both theory and practice showing that polluted social contexts (political fraud, tax evasion) have the potential to increase unethical behavior.

Edwards and Roy (2017) trying to answer why scientists engage in unethical behavior, argued that perverse incentives and decreased funding in research are regarded as factors contributing to it. This dishonest behavior is amplified by outside financial interests and significant competitiveness and also perverse incentives found in academia, as stated above.

The study conducted by Lu et al., (2018) (psychology field) investigated the ethical costs related to air pollution and proposed that a problem as serious as this one can increase criminal and unethical behavior since it increases anxiety. Therefore, the authors analyzed nine-year panel data of more than 9.300 US cities and found that air pollution predicted several major categories of crime. Three subsequent experiments involved American and Indian participants establishing that anxiety mediated the effect of psychologically experiencing a polluted environment on unethical behavior. The authors concluded that air pollution has the potential to contaminate the morality of people as well not only their health. One of the most novel contributions of the paper is that it uncovered the ethical costs of air pollution. Gerlach et al., (2019) conducted a meta-analysis of the experimental literature on dishonest behavior aiming to identify the factors associated with it. The authors concluded that dishonest behavior depends on situational and personal factors. The gender and age (personal factors) of participants were found to be associated with dishonest behavior, while reward magnitude and externalities were cited as situational factors associated with unethical behavior.

Lee et al., (2019) found that psychological entitlement (i.e. manifesting when an individual thinks that she/he should receive desirable treatment irrespective of whether it is deserved) is an antecedent of unethical pro-organizational behavior. In order to demonstrate the impact of this construct on unethical behavior, the authors conducted an empirical study in China and UK. Their results showed that individuals exhibiting high levels of psychological entitlement tend to engage more in unethical pro-organizational behavior, a relationship that is mediated by status striving and moral disengagement. Also, the positive relationship between psychological entitlement and unethical pro-organizational behavior was moderated by organizational identification.

Elshaer and Azazz (2022) examined unethical practices in the workplace during the COVID-19 pandemic. In this regard, the authors conducted a survey on 650 employees from the hotel industry and travel agent companies in the Egyptian context and found that perceived job insecurity encourages unethical behavior in the organization. Their study contributes to a better understanding of the psychological process that drives unethical organizational behavior in the context of job insecurity, having an important contribution to theory and practice.

Cluster 2: factors limiting unethical behavior (Mayer et al., (2012); McGuire et al., (2012); Moore et al., (2019).

McGuire et al., (2012) (corporate finance and accounting fields) investigated the relationship between financial reporting quality and religiosity and found that managers in religious areas seem to be more willing to avoid financial reporting

irregularities. The authors also examined whether religiosity influences managers' methods of managing earnings, documenting a positive association between religiosity and real earnings management and a negative one between religiosity and abnormal accruals, showing a preference for real earnings management of managers in this regard. As the authors argued, organizational strategies and attitudes of managers seem to be affected by religious beliefs when they are part of a social context valuing religiosity. The most important contribution of this study consists of the empirical findings showing that religiosity has the potential to influence business ethics and constrain opportunistic behavior in financial reporting.

The empirical studies conducted by Mayer et al., (2012) and Moore et al., (2019) documented the important role of ethical leadership in decreasing unethical behavior. As such, Mayer et al., (2012) assessed the antecedents and consequences of ethical leadership and found that ethical leadership can deter unit unethical behavior and relationship conflict. The focus of Moore et al., (2019) paper was on how ethical leaders affect the way employees construe morally problematic decisions that can influence their behavior. In this regard, the authors employed four laboratory and field studies in both USA and China and documented that ethical leadership decreases employees' propensity to morally disengage. Overall, ethical leaders have the largest positive influence over weak moral identity individuals and over employees with strong moral identities. The most important contribution of their study resides in a better understanding of the fact that unethical behavior of employees comes from complex interactions between them and their peers, leaders, and the context in which such cases can be found, specifically via leaders' influence over their moral cognition.

4. Conclusion

Given the fact that the interest in unethical behavior increased significantly over time, scholars from different fields were interested to examine it. In order to contribute to a better understanding of the topic we took a multidisciplinary path and review the highly cited papers approaching unethical behavior from areas such as management, business economics, psychology, ethics, engineering, environmental sciences and ecology, and public environmental occupational health. As stated above, we were interested in summarizing existing knowledge on unethical behavior across various areas of research in order to gain an extensive understanding of the topic that can serve as a basis for future research.

Our findings show that the large majority of the highly cited papers analyzed focused on assessing the antecedents of unethical behavior/organizational unethical behavior/unethical pro-organizational behavior and on the factors enabling it. Few papers were examining how unethical behavior can be limited. Among the antecedents and factors triggering unethical behavior scholars were able to document based on the research conducted novel and useful findings for both theory and practice as the following:

a) the propensity of moral disengagement is able to predict various types of unethical behavior,

- b) both psychological entitlement and self-serving justification were identified as antecedents of unethical behavior,
- c) the effect of moral licensing is important to be further examined in the context of unethical behavior,
- d) factors like perceived job insecurity, desire to raise its own status, creativity, and high-class status as well as polluted social contexts and air pollution (increasing anxiety) or the existence of perverse incentives and decreasing funding (available for academia) can trigger unethical and dishonest behaviors.

Ethical leadership and religion were identified as factors limiting unethical behavior (all identified in empirical settings).

The most important limitation of our research consists of the fact that we analyzed a very small number of papers. The second limitation consists in that we selected papers only from the Web of Science database, which despite the fact that is one of the most widely used for visible research, is not the only source of unethical behavior research. In this regard, our findings are limited.

Future research can expand the scope of our study to other databases in order to find the most cited papers approaching unethical behavior. Also, future studies can focus on finding measures that can lead to uniformity in the assessment of unethical behavior by generating innovative insights into the causes and conditions that trigger such practices. In this respect, joining efforts across multiple disciplines can be useful in this demarche in terms of interconnecting existing findings regarding the construction of this topic. Therefore, multidisciplinary research on the topic is needed more than ever to further promote the evolution of research on unethical behavior, especially efforts that are needed into limiting such practices given the negative consequences from economic losses of companies to harming moral characters of individuals.

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INDICATORS AND 3R-TYPE MEASURES IN OVERCOMING FINANCIAL DIFFICULTIES OF COMPANIES

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Abstract: *In the economic life of companies, various financial difficulties can appear, regardless of their object of activity, domain, geographical area, or geopolitical context. The economic reality proved that managing individual difficulties one at a time has little chance of succeeding; because of this, there are international concerns in establishing the regulatory framework and identifying instruments to ensure that the firm can overcome the financial difficulty. Concerns in this sense have been explicitly mentioned for the first time by the World Bank when Principles for effective insolvency and creditor/debtor regime were established in 2001. Recently, the European Parliament has elaborated the EU Directive 2019/1023 regarding the framework of preventive restructuring, debt remittance, and forfeiture of law, besides measures to increase the efficiency of restructuring procedures, insolvency, and debt remittance, which modifies the EU Directive 2017/1132 regarding restructuring and insolvency. While implementing the EU Directive of restructuring in national legislation, the paper analyses and synthesizes the measures of reorganizing and recovering companies while also considering the required legislative instruments. From a practical aspect, the authors' contribution concretizes in a set of economic and financial indicators that warn/reveal the state of financial difficulty of companies. Establishing these indicators represents technical aspects that need to be clarified by the national law and the EU Directive, and it constitutes the challenge of readjusting the companies. The faster the intervention, the bigger the chances of salvaging the company. Interest in this topic is growing, given the temporary suspension of the activities of many companies caused by several factors. In the context of the measures taken to prevent the COVID-19 pandemic and increase the costs of raw materials, gas, and energy, the economic evolution is unpredictable and challenging. Considering that we are in the process of modifying the national legislation, the proposed set of indicators cannot be verified on the level of companies that encounter financial difficulties. Therefore, applying and practically verifying these economic and financial indicators will be the subject of subsequent research.*

Keywords: *financial difficulty, reorganizing, recovery, resilience, economic and financial indicators, framework.*

JEL Classification: G34, G33, G38

1. Introduction

Financial difficulty is a topic of great interest that focuses the attention of companies on finding ways of economic recovery and getting out of an impasse. Companies are interested in more than just financial difficulties. The legislator is also interested in creating the general legal framework and guidance, meeting the companies' needs, and being seen as partners: producers, employers, taxpayers, etc. The accountants are also interested in this area; their purpose is to provide solutions from the 3R perspective (recovery, reorganization, resilience) for the companies that have their financial statements analyzed.

Web of Science offers ample information about the researchers' interest in this study area. By associating our study "financial difficulty" with a keyword such as "reorganization," "resilience," and "economic recovery," we have identified that between 2018 and 2022, the Economics, Business, Business Finance, and Law domains have been published 1.386 scientific papers in Open Acces regimen.

Figure 1 presents the Web of Science categories with the most published scientific papers that studied this keyword combination.

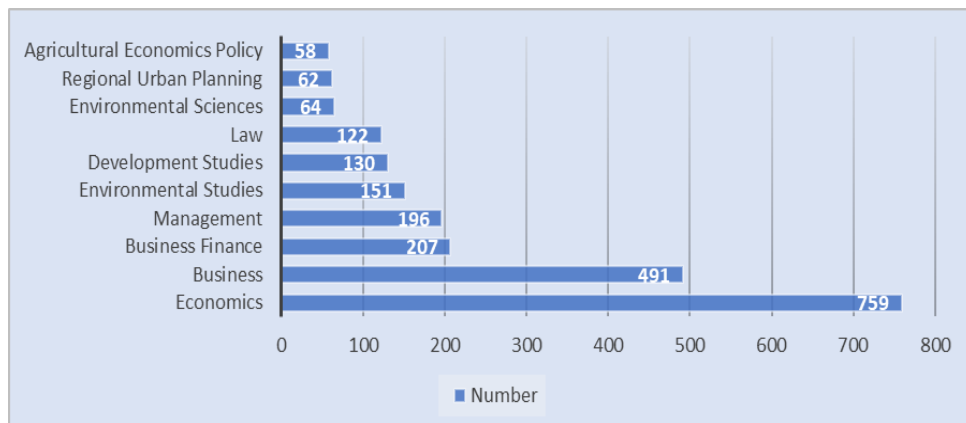


Figure 1: Number of scientific papers on categories on Web of Science

Source: Authors' projection by <https://access-clarivate-com.am.e-nformation.ro/> with Microsoft Excel

2. Literature review

It can be noticed that the researchers' interest is focused on domains such as Economics and Business, a priority in the ten areas of study also being Business Finance, Management or Law.

The density of connections between the keywords from the title, abstract, or those mentioned by the authors is extensive; a grouping of elements done with WoSviewer has generated 7 clusters of the 429 items linked to our topic research. We have identified an increased interest in "resilience," a keyword that appears in 5 out of the 7 clusters under different connotations: organizational resilience, supply chain resilience, economic resilience, financial resilience, psychological resilience, regional resilience, community resilience, building resilience, business

resilience, entrepreneurial resilience, organizational resilience, and urban resilience.

Although the spotlight is on resilience, it cannot be studied without a legal framework that regulates this direction. Studying the connection of the word "framework" (**figure 2**), we have ascertained that there are research links to topics such as performance, vulnerability, integration, critical success factors, dynamic capabilities, adaptation, sustainability, and even design.

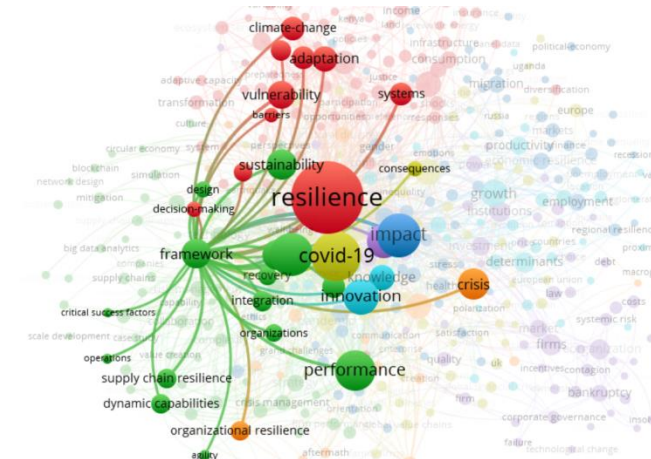


Figure 2: Research connections of the word “framework”

Source: Authors projection by <https://access-clarivate-com.am.e-nformation.ro/> with VOSviewer

These links confirm that there is an interest so a framework that would target companies' reintegration pattern (design) as a response to vulnerabilities and organizational resilience.

It can also be noticed the influence of the COVID-19 pandemic on the studies overlooking financial difficulties and their consequences (**figure 2**), as well as their link to "resilience" and "recovery" (**figure 3**).

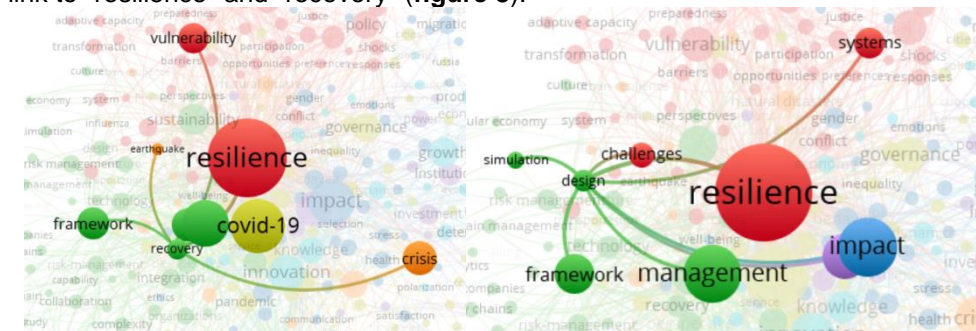


Figure 3: Research links of the words "recovery" and "design"

Source: Authors projection by <https://access-clarivate-com.am.e-nformation.ro/> with VOSviewer

The state of vulnerability in crisis conditions, such as COVID-19, has shifted the attention of researchers toward recovery and resilience (**figure 3**), with a significant interest in the already existing framework or the one to be elaborated.

The research links of the design to "framework," "simulation," "management," "challenges," and "systems" reveals a strong connection between the purpose of the legal framework on creating systems and opportunities of recovery to the companies in financial difficulty and active management. Through "diligent management," we understand organizing an impactful way of leading that will respond to the crisis challenges that affect their activity, their ability to recover, reorganize, and their resilience.

We can state that a company's objectives are either short-term or long-term. In the category of short-term objectives, we include the growth of the company by orienting it towards the market, expanding the client portfolio and rewarding their loyalty, increasing the rate of satisfaction of its employees, raising the fiscal value and the profit, raising the financial performance and strategic reorganization of the company.

Amongst the long-term objectives, the following are included

- consolidating the financial position by occupying an honorable place in the category of high-performing companies,
- rising the equity and the net asset,
- increasing the ability to face the challenges generated by outside factors,
- innovating and transforming the model of business,
- avoiding financial difficulties and enduring a high-paced competitive market.

The Small and Medium-sized Business sector (SMB) is an integral part of the economic entities and represents a significant force for the economic development of a country; however, this sector is the most prone to being affected by financial risk and financial difficulties. According to Slusarczyk and Grondys 2019, the most frequent manifestation of financial risk for SMBs is the difficulty in financing a business and lack of funds for development.

The financial difficulties, financial risk, and resilience of companies have been the subjects of research for a multitude of studies and many articles of speciality.

Several disruptive factors generate financial difficulties:

- *Risk and financial fragility or incapacity of resilience* (Slusarczyk and Grondys, 2019; Rozmainsky et Rodionova, 2021; Baltes and Pavel, 2019; Huang and Farboudi Jahromi, 2021);
- *Manipulation of accounting information in order to be eligible for bank financing* (Grammatikos and Papanikolaou 2021);
- *Reducing the number of employees, workplace conditions, and employee satisfaction as a factor influencing financial difficulties* (Lopes et al., 2019; Rico et al., 2021); According to Bodnar et al., there is a strong and significant correlation between financial difficulties, credit difficulties, downsizing, and salary. Thus, these difficulties affect employee satisfaction.

Various specialized articles reveal the importance of predicting the financial difficulties of the control systems and management decisions. (Durica et al 2019; Svabova et Michalkova L. 2020, Štefko et al 2020, Zéman and Lentner 2018)

Any management team would try to take measures toward an *economic recovery* when financial adversities occur. Who can get involved to help the economic recovery and the resilience of economic entities? What can be done?

The state should intervene via its economic and fiscal policies or through specific provisional aid measures (federal funds, help aids): Staal, 2020; Yuan et al., 2022; Hepburn et al., 2020,

Sergant and Van Cayseele (2019) say that state aid can influence access to resources, which can prevent financial difficulties. However, they can also be a way of economic recovery for the companies. Economic recovery can also be the efficient use of resources in the activity and workforce occupation. (Acharya et al., 2019)

According to Jaimovici and Siu (2020), there is a link between economic recession and the unemployment rate and economic recovery and increased employment rate.

Innovation is the phenomenon that leads to an increase in resilience on a macro and microeconomic level. For example, in the study by Bristow and Healy (2018), it is said that the areas or communities where the innovation level is higher have proven to be more resilient to financial difficulties or crises, or it has been observed a faster recovery.

In the context of companies' financial difficulties, the problem of their reorganization must be addressed. The success of the reorganization process to save the companies depends on various factors: the quality of the accounting systems, the quality of early warning systems, and the existence of a reorganization plan. (Kuttner et al. 2022)

The owners' commitments and financial contributions, as the business owner's personality, can considerably impact the reorganization process's success. At the same time, the latter's experience is not a factor to be neglected, but it does not significantly influence (Mayr et al., 2021).

The human factor, the legislative factor, and the need for some analysis models of the ability to reorganize significantly impact the process's success. (Stroie si Duşescu 2019; Ippoliti and Tria 2020).

3. Reorganization - the second chance implemented through the insolvency procedure

The rationality of concerns in overcoming the state of difficulty is as simple as it is real: a company that exceeds these general difficulties or the financial ones is a company that will contribute to the economic development of the increased standard of living of its employees. This has appeared as the idea of the second chance implemented via a reorganization as a component of the insolvency procedure.

Insolvency does not mean bankruptcy. Insolvency is defined as "*the state of the debtor's patrimony that characterizes as monetary funds insufficiency on paying the certain, liquid and exigible debt, and that is assumed when the debtor, after 60 days following the payment due date, has not paid its debt to its creditor*" according to Law no. 85/2014. The insolvency procedure starts with a period of observation that allows the company, under the judicial administrator's supervision, to analyze its ability to recover. With the vote, consequently, with the agreement of the

creditors, the reorganization plan will be approved and confirmed afterward by the syndic judge so that the company goes into the reorganization phase. Only in the case in which no reorganization plan is proposed, or the proposed plan is not approved by the creditors (or is not confirmed by the syndic judge) does the company go into bankruptcy. Nevertheless, of course, except when the company does not have assets, it can file to start the simplified bankruptcy procedure.

Figure 4 presents the report on the number of insolvency procedures in the period between 2010 and the first semester of 2022.

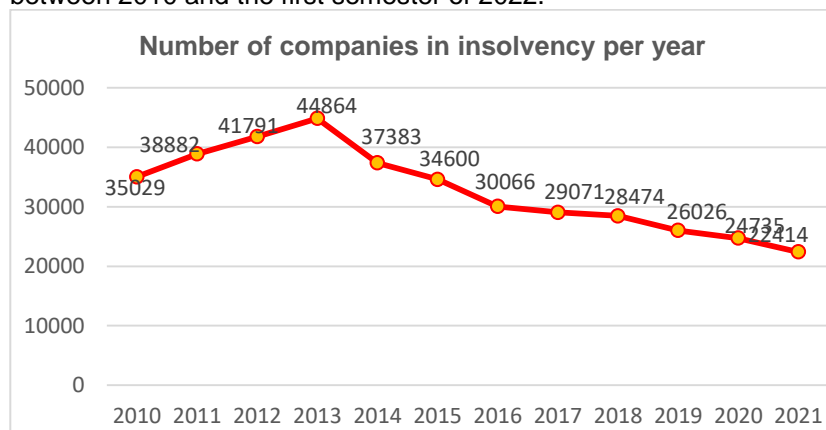


Figure 4: Number of companies in insolvency procedures per year
Source: ONRC – National Office of Commerce Registry

An increased number of companies that go into insolvency can be noticed after the financial crisis of 2008-2009, as apparent effects of it, but not limited to that crisis.

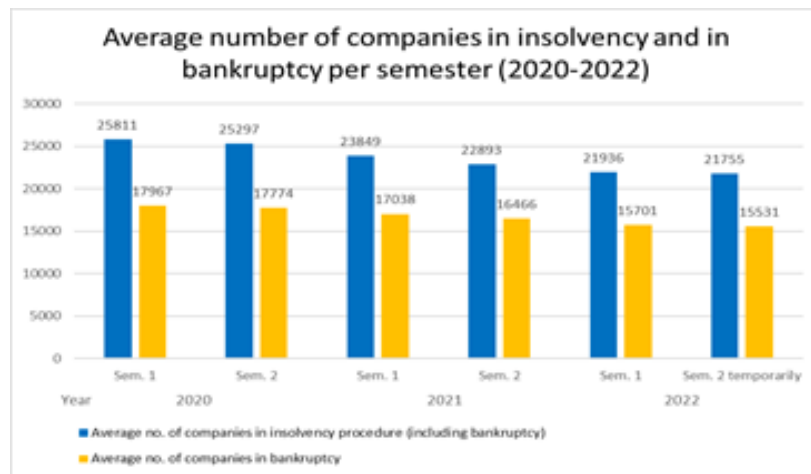


Figure 5: Average number of companies in insolvency proceedings and bankruptcy per semester (2020-2022)
Source: ONRC - National Office of Commerce Registry

In the **figure 5**, we analyze the rapport between the total number of insolvency procedures opened (including bankruptcy) and bankruptcy procedures between 2020-2022.

4. Preventive procedures regarding insolvency

A large number of opened procedures in insolvency is also due to protective legislation for the debtor (Law no. 85/2006 regarding the insolvency procedure), which determined a considerable number of companies to speculate on this legislation's advantages given to the debtor.

Perfecting the legislation in 2014 (Law no. 85/2014 regarding the prevention of insolvency and insolvency procedure), re-establishing the balance between the creditors and the debtor company is a significant cause in the decreased number of insolvency procedures opened after the entry into force of this law.

The decrease in the number of procedures (reorganization and bankruptcy) can easily be noticed, but the ratio of bankruptcy remains high in the overall scheme. Therefore, specific measures are imposed (legal framework) for the early recovery of companies.

For the clarity of the information, we must note that many reorganization plans fail due to the massive impact of triggering the insolvency procedure on economic partners and the creditors' reluctance.

It is also true that declaring insolvency and opening its procedure is considerably delayed; the companies postpone triggering the insolvency procedure beyond the limit, making a recovery possible. In short, the companies declare their insolvency when there is no solution for recovery. The management team's low degree of entrepreneurial education is a severe hindrance to the company's recovery.

The reduced share of the successful reorganization procedures, finalized with the reinsertion of the economic market of the company, has led international (as well as national) authorities to search for solutions in this sense.

The trend is clear: overcoming financial difficulties "on the go" without triggering the insolvency procedure. It becomes clear that resilience, the companies' continuity, and keeping them on the market is the best solution for the companies and the economic environment, with beneficial effects for the national and global economy. In this context, *the EU DIRECTIVE 2019/1023 is approved by the European Parliament and Council, on preventive restructuring frameworks, on the discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency, and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency)*. Restructuring represents a preliminary step to insolvency when preventive or pre-insolvency procedures are set up to give another chance of recovery to companies facing difficulties.

According to the Directive, "restructuring should enable debtors in financial difficulties to continue the business, in whole or in part, by changing the composition, conditions or structure of their assets and their liabilities or any other part of their capital structure — including by sales of assets or parts of the business

or, where so provided under national law, the business as a whole — as well as by carrying out operational changes. Unless otherwise explicitly provided for by national law, operational changes, such as the termination or amendment of contracts or the sale or other disposal of assets, should comply with the general requirements that are provided for under national law for such measures, in particular civil law and labor law rules. Any debt-to-equity swaps should also comply with safeguards provided for by national law. Preventive restructuring frameworks should, above all, enable debtors to restructure effectively at an early stage and avoid insolvency, thus limiting the unnecessary liquidation of viable enterprises. These frameworks should help prevent job losses and the loss of know-how or skills. It should maximize the total value to creditors, owners, and the economy as a whole in the event of liquidating the assets of the enterprise or in the case of the best future. "

The objective of this EU Directive is to perfect the market, free movement of capital, economic action freedom, as well as:

- viable companies and entrepreneurs facing financial adversities should have access to a national framework of effective preventing restructuring procedures that would allow them to continue working;
- insolvency avoidance.

The Directive sets up the preventive procedures (pre-insolvency) to be applied by companies that have financial difficulties but do not exclude applying these procedures to companies facing adversities other than financial ones. Sure enough, general adversities, such as losing an important contract, as the Directive exemplifies, will become financial difficulties and affect the company's ability to pay its debts when due, meaning in the foreseeable future. What we can add to the causes of difficulty for companies are rising costs of raw materials, high prices of elements in general, electric energy costs (current state), and even workforce problems – its significant fluctuation. Moreover, the adversities of a company will reflect in its financial statement and affect its financial indicators. In this regard, we can compare this microeconomic state (of a company) to a macroeconomic one, where economic crises, even if non-financial factors cause them, are also financial crises, affecting the ability to pay on term the government debt.

Thereby, usage of the term "financial difficulty" in the Directive is justified. However, the application area allows EU states to extend over the companies that encounter adversities generated by causes other than financial if this difficulty affects the debtor's ability (present or in the future) to pay its debts on terms.

The Directive regarding restructuring framework does not define the financial difficulty state, leaving this definition up to its member states, according to each one's particular state system and national law.

Implementing the Directive in national law was made via Law no. 216/2022 regarding the alteration and addition to Law no. 85/2014 regarding insolvency preventing procedures and insolvency. The national law, in consensus with the Directive, extends the financial difficulty and defines the state of difficulty (art. 5, line 1, pt. 26, 2): "Difficulty represents the state generated by any circumstance that determines a temporary impairment of activity, which leads to a natural and severe threat on the company's ability in the future to pay its debts on the term if no proper measures are taken; the debtor found in a state of difficulty can pay its debts as they become due."

The difficulty state must not be insolvency, respectively "it does not affect the ability to pay current debts on the term when they are due," and by applying the pre-insolvency measures, the actual insolvency can be avoided.

The pre-insolvency procedures stated in the national legislation are "restructuring agreement" and "preventive concordat." These preventive procedures imply the existence of an early warning indicators system.

Figure 6, below, presents the connection between preventive procedures and insolvency (reorganization/bankruptcy) in saving viable companies that go through a problematic state:

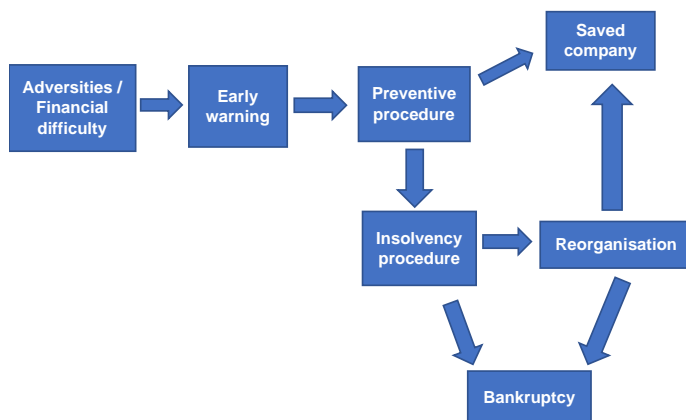


Figure 6: Connection between preventive procedures and insolvency in saving viable companies

Source: Author's projection

5. Conclusions

The main challenge to companies will be identifying the complex state/financial difficulty that will allow access to preventive procedures in insolvency, with the purpose of their recovery. In this context, the early warning system is a topic of great actuality for specialists.

In our opinion, the most valuable indicators in forming the early warning system would have to focus on the three significant categories: solvency, liquidity, and rentability, completed by other indexes for structure.

Studying these indicators that will take part in the early warning system will represent the following research topic for us.

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AN EMPIRICAL STUDY ON THE INFLUENCES OF ACCOUNTING POLICIES, ORGANIZATIONAL CLIMATE, AND FINANCIAL REPORTING DISCLOSURES ON THE PERFORMANCE OF NON-FINANCIAL LISTED COMPANIES

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Abstract: *This paper seeks to analyze the impact of disclosures on managers' characteristics, business climate information, and key accounting policy variables on financial performance. Data were extracted from the annual reports of the non-financial listed companies on the Bucharest Stock Exchange. Fifty-seven companies from eight industries have been investigated over five years. The least-squares method for panel data (Panel Least Squares) was used in estimating eight models that proved to be valid for the Fisher test. The findings showed that a high level of disclosure of information about managers increases performance. In contrast, the increased disclosure of business climate information and the average degree of internal control is leading to lower company performance. From the analysis of key accounting policy variables, the estimated models showed that the overall level of provisions has a significant positive influence on the performance of the companies. In two models also the estimates of decommissioning costs of tangible assets have a significant positive impact on performance. A significant negative impact on performance is exerted by uncertainties in recognition, accounting valuation, or presentation of assets, judgments, and assumptions on contingencies, litigation risks, and R&D innovation costs. The existence of the audit report and the type of auditor do not significantly influence the performance of the examined companies. However, the existence of the corporate governance report is significantly and positively impacting financial performance.*

Keywords: *disclosure, financial performance, managers, business climate, accounting policies, listed companies*

JEL Classification: M41, M21, C12

1. Introduction

The interest of researchers, as well as practitioners in recent decades in the study of factors influencing the performance of companies, has increased significantly due to the concerns of managers in the direction of streamlining strategies for optimizing performance measurement indicators. Studies conducted by Quayes and Hasan (2014), Pavlopoulos et al. (2019), Sari et al. (2020), Wang et al.

(2020), Escamilla-Solano et al. (2021), Liu et al. (2021), Ali et al. (2021), Thuy et al. (2021), Abdi et al. (2022) showed that increasing the disclosure degree and transparency of information in companies' annual reports influences performance indicators. It depends on the company's management team how much attention pay to these disclosure practices. Also, they choose specific accounting policies that are advantageous for the company's financial reporting (Odo Onyemaechi and Isamade Burabari 2021, Onipe et al., 2015). Therefore, financial position and performance depend significantly on accounting policies and estimates made (Sacer et al., 2016).

Our approach consisted of an empirical study on a sample of non-financial companies listed on the Bucharest Stock Exchange (BSE), for five consecutive years which aims to examine the influence of the disclosure degree of information on managers' characteristics, business climate, and accounting policy variables on the aggregate indicator (composite index) for measuring financial performance determined by Multivariate Principal Component Analysis (MPCA), based on panel data. The remainder of this paper contains a brief literature review on the topic followed by a description of the used methodology, continued by the section dedicated to the description of the obtained results, and in the end findings, limits and further research paths can be found.

2. Literature Review

Abdi et al. (2022) in their study conducted on airlines companies shows that involvement in social and environmental actions leads to an increase in financial performance. The governance initiatives in exchange lead to the growth of the firm's market-to-book ratio. In the relationship between these two dependent variables and ESG, the firm size has a moderating role, while the firm age was not found to be a significant moderator for this sample. To assess the performance of Nigerian listed oil and gas companies, Mohammed Sani (2018) investigates the volume of social and environmental (ES) disclosure, before and after the introduction of the requirements to publish this information. Findings revealed that the volume of disclosures has increased in the last years, the extent of disclosures on environmental information is higher than social, and corporate size has a positive and significant effect on disclosure. With a focus only on environmental disclosure, Wang et al. (2020) tracks the behavior of Chinese listed companies along five years and finds that environmental disclosures directly and positively impact financial performance. Based on GRI Standards in quantifying the main independent variable, Thuy et al. (2021) investigate the possible link between corporate social responsibility (CSR) disclosure and financial performance. Based on data obtained from 225 companies in Vietnam, over five consecutive years, the authors showed that CSR disclosure has a positive impact on financial performance, and financial statement comparability has a mediating effect on this relationship.

From the perspective of the usefulness of integrated reporting (IR), Bernardi and Stark (2018) note that with the introduction of IR in South Africa, the levels of ESG disclosures and, in particular, the levels of environmental disclosure, are associated with the analyst forecasts accuracy. Pavlopoulos et al. (2019) examined the IR disclosure behavior of listed companies in 25 countries, from 2011 to 2015,

to identify any link between the quality of IR and a firm's market valuation. Their results proved a positive association between the two variables. Abnormal stock returns being positively associated with earnings quality are also the effects of more effective use of IR. Similar to Pavlopoulos et al. (2019), but on Chinese companies, Sun et al. (2022) noted that IR higher disclosures on six types of capital lead to a greater firm value. Also, in terms of corporate water disclosure, Ali et al. (2021) anchors their study on water issues and the achievement of SDG 6 and analyze the effect of corporate disclosures on the financial performance of electric utility companies. Results showed that to increase EPS, companies in the sector should disclose more on resource reduction policy and water efficiency. Following the objective of SDG 5, Escamilla-Solano et al. (2021) aim to analyze the impact of gender equality disclosures on the profitability of Spanish-listed companies. From content analysis of the CSR reports examined from 2016 to 2018, and the panel data analysis it can be noted the importance of gender equality policies implementation and disclosures on accounting business performance. The positive impact on asset return (ROA) and return on equity (ROE) encourage managers to reduce inequality and disclose these initiatives as a source of competitive advantage.

Similar to Ali et al. (2021) a study on FR quality was conducted by Liu et al. (2021), on Chinese listed companies. Through regression analysis, the authors obtain evidence that water disclosures can significantly improve the quality of FR. Companies that have constantly disclosed water information have recorded increased social focus and corporate transparency. Water disclosures reduce the level of financing constraints and mitigate the costs of debt. Quayes and Hasan (2014) examined the link between financial disclosures and performance. Their analysis conducted on microfinance institutions in 75 countries shows that better disclosure has a statistically significant positive impact on operational performance. Environmental management accounting practices have a positive impact on organizational performance, according to the study done by Sari et al. (2020) based on the responses obtained from management accountants of large manufacturing companies. By questionnaires and thematic interviews analysis, Badulescu et al. (2021) argued that the development of accounting practices brings a new contribution to the performance of companies, and in the view of Domil et al. (2019) the existence of accounting policy manual directly, positively and significantly influences the performance of the accounting information system. Odo Onyemaechi and Isamade Burabari in their article published in 2021, appreciate that disclosures on inventories accounting policies and disclosures of receivables significantly affect ROA. From the perspective of management accounting practices' influence on business performance, Otieno et al. (2021) from data collected questionnaires and applying multiple linear regression analysis, found that internal control practices lead to a higher level of performance. Among the accounting practices analyzed on SMEs, Balagobei (2020) shows that a significant positive influence on organizational performance has the budgeting practices.

3. Methodology

Following previous works (Bogdan et al. 2017a, Bogdan et al. 2017b), this paper aims to assess the impact of managers' characteristics disclosures, business

climate, and key variables of accounting policy on the level of performance of selected companies. Performance was measured based on the construction of an aggregate indicator, the performance index. The analysis is performed on panel data using Eviews 9.5.

The study takes into analysis fifty-seven companies listed on the Bucharest Stock Exchange from eight sectors of activity, in five consecutive years and uses the following independent variables:

- ✓ the average degree of managers' characteristics information disclosure ($di_managers$);
- ✓ the average degree of disclosure on business climate information ($di_business_climate$);
- ✓ the average degree of internal control disclosures ($di_control_intern$) is determined as an average score based on the level of presentation of information disclosed related to management control, budgetary control, controlling, and internal audit;
- ✓ the key accounting policy variables are determined based on the principal component analysis (PCA): total provisions; uncertainties regarding the recognition, accounting valuation, and presentation of assets, debts, contracts but also cloud accounting system; estimates of decommissioning costs of property, plant, and equipment (provisions for decommissioning); contingency judgments and assumptions (assets and contingent liabilities); litigation risks; research and development costs, innovation, and creativity. Accounting policy variables have been transformed using percentile rank to create the same unit of measurement as the companies' performance index;
- ✓ auditor type (Big4 or others) as a binary variable that takes the value of 1 if the auditor is one of the companies in the Big4, 0 for others;
- ✓ the existence of the audit report is a polyichothomic variable that takes the values 0 if there is no audit report, 1 if it is prepared and signed by others outside the Big4, and 2 if the audit report is prepared and signed by one of the Big4 audit company;
- ✓ the existence of the corporate governance report is a polyichothomic variable that takes the values 0 if there is no governance report, 1 if there is only one (for example, the corporate governance report), and 2 if there is more than one published report on governance issues;
- ✓ the branch of activity is a polyichothomic variable that takes values from 1 to 8 for the eight sectors of activity included in the analysis.

To exemplify the methodology followed, we present below the examined issues in the case of the variable business climate and the statistical correlations analyzed. Therefore, to determine the average disclosure degree of business climate information for the investigated period, the aim was to highlight the issues related to financial reporting and regulatory framework (IFRS, National Securities Commission, and other specific regulations), express reporting and communication requirements for certain industries (eg. segment reporting), external environmental factors of competitive pressure (performance, time, environmental and social responsibility, volunteering, patronage), customer satisfaction, organizational culture, limited resources (time, staff, budget, other restrictions), other external factors that may generate pressure to change the culture of the organization

(political, cultural, socio-educational, religious and others). Thus, the closer the average disclosure degree is to 3, the higher the volume of business climate information presented in the annual reports of companies. Analyzing the evolution of the average disclosure scores for the business climate information for the investigated period, we can see a strong upward trend, this indicator registering the value of 1.06 in the first year and the value of 1.7 in the last year, increasing the volume of information provided on the business climate. Analyzing the correlation between the average disclosure index of business climate information for the fifty-seven sampled companies with the synthetic designed performance index, it can be highlighted that the empirical results of the Pearson coefficient revealed (Table 1) that the intensity of the link between the two variables is extremely low and in addition statistically insignificant (Sig (2-tailed) is above the maximum significance threshold of 10%).

Table 1: Analysis of the correlation between the average disclosure index of business climate information and the performance index

		Average disclosure index of business climate information	Composite index
Average disclosure index of business climate information	Pearson Correlation	1	0.164
	Sig. (2-tailed)		0.224
	N	57	57
Composite index	Pearson Correlation	0.164	1
	Sig. (2-tailed)	0.224	
	N	57	57

Source: own processing of the data

Analyzing the potentially significant differences in the average disclosure score for disclosing information on business climate by industry, the results of the ANOVA analysis showed that there are significant differences in the business climate disclosures depending on the industry in which the company activates (Sig. is less than the 1% significance threshold). Thus, the highest disclosure degree of information on business climate is recorded in the last examined year by companies carrying out professional scientific and technical activities (2.75) followed by those in the extractive industry sector (2.56) and those in production, supply of electricity, heat, gas, and water (2.43). On the other hand, there are companies in the hotel and restaurant sector with a low degree of disclosure of business climate information (Table 2).

Table 2: The average disclosure index of business climate information by industry

		Average disclosure index of business climate information
		Mean
Industries	Extractive industry	2.563
	Production and supply of electricity and heat, gas, hot water, and air conditioning	2.438

Construction	1.313
Hotels and restaurants	1.292
Professional scientific and technical activities	2.750
Wholesale and retail trade	1.344
Transport and storage	2.031
Manufacturing industry	1.580

Source: own processing of the data

Also, in the analysis, we followed Majdalany and Henderson (2013) approach who argued that several studies have shown that there is an inevitable time lag between increasing transparency on the one hand, and performance on the other hand; and this time lag is generally perceived as a year (Aksu and Kosedag, 2005). Thus, we considered that there is a time gap between the disclosure degree of information and the company's performance.

The general form of the panel data regression model is:

$$\begin{aligned}
 Perf_{indice}_{it} = & \alpha_0 + \alpha_1 \cdot di_{business_{climate}_{it-1}} + \alpha_2 \cdot di_{managers_{it-1}} + \alpha_3 \\
 & \cdot di_{control_{intern}_{it}} + \alpha_4 \cdot tip_{auditor}_{it} + \alpha_5 \\
 & \cdot existenta_{raport_{audit}_{it}} + \alpha_6 \\
 & \cdot existenta_{raport_{guv_{corp}_{it}} + \sum \alpha_i \cdot var_{politica_{contabila}_{it}} \\
 & + \varepsilon_{it}
 \end{aligned}$$

where: the dependent variable is the performance index of companies calculated according to previous works (Bogdan et al. 2017a); the independent variables are the average disclosure degree on business climate information, the average disclosure degree on managers attributes information, the average disclosure degree on internal control, key accounting policy variables, type of auditor, the existence of audit report, the existence of corporate governance report; and ε_{it} are the model errors. The model estimation was initiated with a fixed-effects model by fixed cross effects and periodic fixed effects, using the least-squares method (OLS). The temporal effects included in the models were aimed at capturing, over time, those developments that are common to all companies. Redundant Fixed Effects testing was used to decide which of these models is suitable for our data set (fixed effects for periodic effects, cross effects, or both). The Hausman test was used to identify whether a fixed-effects model (FEM) or a random-effects model (REM) was more appropriate. A low probability in the Hausman test suggests the use of FEM (fixed effects models), while a high probability in the test emphasizes REM (random effects models). The problem of cross-heteroscedasticity in the estimation framework was addressed using standard corrected heteroskedasticity errors based on the improvement of standard estimator errors, without changing the values of the coefficients. Another basic hypothesis of the model that needs to be verified states that there is no linear relationship between two or more explanatory variables (absence of collinearity) (Jula, 2003). Because the correlation analysis refuted the presence of collinearity between the accounting policy variables, they will be considered as a set within the models. Testing the

autocorrelation of errors in model estimation involves the application of Durbin-Watson (DW) statistics which may suggest 1st order autocorrelation of residues. The existence of collinearity can be corrected using the Generalized Least Squares (GLS) method. Determining the validity of the model involves the application of the Fisher test. The interpretation of the results considered the critical probability related to the Fisher test (prob. or significance). Thus, if this probability is less than the significance threshold set by the risk specification, then the established model is considered valid.

4. Discussion of Results

Given those mentioned in the methodology section, the first step was to estimate models with fixed effects for both sections (companies) and periods, using the least-squares method. Subsequently, the results of the redundant fixed effects test led to the rejection of the null hypothesis of redundant fixed effects for periods but proved the validity of the fixed effects at the level of companies. Therefore, we concluded that the appropriate model is the one with fixed effects for cross-sectional data. In the second stage, the models were estimated assuming the existence of random effects, and the Hausman test was used to decide between the use of fixed or random effects. The empirical results of the Hausman test showed that the fixed effects estimator is consistent, with a probability (significance level) below 1%. Therefore, the following models were estimated using the least-squares method for panel data (Panel Least Squares) and proved to be valid for the Fisher test. The most important empirical results of the estimation process for the proposed models are presented in Table 3.

Table 3: Empirical results of models that highlight the analysis of variables that influence the performance of the sampled companies

Variables	M1	M2	M3	M4	M5	M6	M7	M8
Disclosure index for managers(t-1)	0.836*			-1.01			-0.248	
Disclosure index for business climate(t-1)		-1.26*			-0.65***		-0.09	
The average score of internal control			-2.21*			-5.23*		-3.59*
Accounting policy variables								
Total provisions				0.03*	0.03*	0.03**	0.03*	0.03*
Uncertainties*				-0.10*	-0.09	-0.034*	-0.09*	-0.02***
Estimates of decommissioning costs of property, plant and equipment				-0.016	-0.0035	0.116*		0.085*
Contingency judgments and assumptions				-0.02*	-0.012**	0.063	-0.009***	
Litigation risks				-0.06*	-0.048*	0.019	-0.052*	
R&D costs				-0.06*	-0.058*	-0.086*	-0.053*	-0.087*
The existence of the audit report	2.98							
Auditor type	-4.38	-5.93	-2.30	-2.64	-3.54	-2.37		
The existence of the corporate governance report		2.53*	1.47*	0.0005	0.204	0.487	0.265	0.875**
Constant	47.95*	51.48*	49.92*	63.78*	62.12*	46.71*	62.95*	49.87*
Observations	285	285	285	285	285	285	285	285
Adj.R2	0.997	0.997	0.997	0.99	0.985	0.98	0.99	0.99
F-test	1352.48*	1338.73*	1406.37*	331.28*	233.00*	216.39*	355.97*	476.00*

F-test for all individual company effects = 0	14.71*
F-test for all time effects = 0	0.053
Hausman Test	9.02*

* recognition, accounting valuation and presentation of assets, debts, contracts, but also cloud accounting system

Source: own processing of the data

The empirical results of the first three models showed a positive impact of the average disclosure degree of managers' characteristics on the performance of analyzed companies and a negative impact of the average disclosure degree of business climate and internal control information on companies' performance. Analyzing the values of the regression coefficients in the three models, it can be seen that the influence of the average disclosure degree of managers' attributes is positive and strongly statistically significant, at the threshold of 1%. In contrast, the average disclosure degree regarding the business climate or the average disclosure degree of internal control shows a negative and significant impact on the future performance of companies, at the threshold of 1%. Thus, if the average disclosure degree of managers' information in the past period increases one unit, then the company's current performance will increase by 0.84 units on average, while increasing the degree of disclosure on the business climate leads rather to a decrease in the performance of the companies, in the current period by approximately 1.26 units, *ceteris paribus*. Also, the average disclosure degree of internal control information leads to a decrease in the performance of companies by approximately 2.21 units, *ceteris paribus*. It is found that the type of auditor and the existence of the audit report does not significantly influence the performance of the analyzed companies. Regarding the quantification and the influence of key accounting policy variables on the performance of sampled companies, it can be seen that the average disclosure degree of managers' characteristics information no longer shows a significant impact on company performance, instead, the business climate and internal control disclosures maintain significant influence on company performance. Among the key accounting policy variables, the ones that show a significant influence on the performance of the analyzed companies are total provisions with a positive impact on the companies' performance, uncertainties regarding the recognition, accounting measurements, and presentation of assets, judgments, and accounting estimates on contingencies, litigation risks, R & D and innovation costs exert a negative impact on company performance.

Examining the simultaneous influence of the average disclosure degree of managers' attributes information and business climate information, but also the accounting policy variables on the performance of companies, it can be seen that the average degree of disclosure of information at the level of managers and business climate does not have a significant impact on the performance of selected companies. Instead, the accounting policy variables with a statistically significant impact on companies' performance are total provisions, uncertainties regarding the recognition, accounting measurements, and presentation of assets, judgments, estimates, and assumptions regarding contingencies, litigation risks, and RDI costs. Given the medium intensity connection between the average business climate disclosure score and the average internal control disclosure score quantified by Pearson's correlation coefficient of 0.587, the variables will be incorporated into different models. Thus, the optimal model is the model that

captures the influence of the average internal control disclosure score and the accounting policy variables, but also the type of auditor and the existence of the corporate governance report. Consequently, an excessive internal control shows a significant but negative impact leading to a decrease in the performance of the analyzed companies. Accounting policy variables, such as total provisions and estimates of decommissioning costs of property, plant, and equipment lead to an increase in the performance of companies, while uncertainties regarding the recognition, accounting measurements, and presentation of assets and contracts and high RDI costs generate a decrease in the performance of sampled listed companies. We note that the type of auditor does not show a significant influence on the performance of companies, while the existence of the corporate governance report leads to an increase in the performance of companies.

5. Conclusion

An element of originality of this paper is given by the determinants of accounting policies on the financial performance for the selected companies using the multivariate analysis in main components specific to panel data for five consecutive years, which can highlight the most important groups of companies based on performance using classification analysis. Thus, PCAmixdata was used for mixed data, having the particularity of using the version specific to multivariate analysis - Multiway Principal Components Analysis (MPCA), which is based on panel data. Further on, the average disclosure degree of managers' attributes information was determined based on eight items, and the average disclosure degree on business climate information was based on seven elements, but also the average internal control disclosure score. Statistical testing and processing of the differences in these disclosures indices were also performed at the level of managers and business climate information depending on the activity sector, the type of auditor, the existence of the audit report, or the existence of the corporate governance report using specific statistical tests like analysis correlation, ANOVA analysis, nonparametric tests - Mann Withney or Kruskal-Wallis.

This paper integrates the results obtained in previous studies (Bogdan et al. 2017a, Bogdan et al. 2017b) and is dedicated to quantifying the impact that the average disclosure degree of managers' characteristics information, business climate, internal control, and key accounting policy variables have on the performance level of the companies measured through the performance composite index built using panel data analysis. The results showed that the average disclosure degree of managers' traits leads to an increase in the performance of companies, while a higher degree of disclosure on business climate or internal control leads to a decrease in the performance of companies. Accounting policy variables such as total provisions and estimates of decommissioning costs of property, plant, and equipment lead to an increase in the performance of companies, while uncertainties regarding the recognition, accounting measurements, and presentation of assets, and contracts, and high RDI costs lead to a decrease in the performance of sampled listed companies. It is worth mentioning that the type of auditor does not show a significant influence on the performance of companies, while the existence of the corporate governance report leads to an increase in the

performance of companies. This study finds its main limits in the sampled companies, the choice of variables for determining the average score for the disclosure degree information, and the design of the composite index to express performance. Future research aims to expand the database, grouping companies into performance classes based on the correlations investigated and identifying new possibilities for modeling the relationship between information disclosure indices and company performance.

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SECTION INTERNATIONAL BUSINESS, EUROPEAN
INTEGRATION, FOREIGN LANGUAGES AND BUSINESS
ENVIRONMENT

**THE LATEST CRISES CHALLENGING THE EU'S EXPORTS. ANY
CHANCES TO MAINTAIN THE COMPETITIVENESS?**

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Abstract: Trade is at the centre of Europe's model of economic prosperity and competitiveness. As stated in the new Trade Policy Strategy set out by the European Commission (2021), the trade policy has a key role to play in the recovery from the COVID-19 pandemic. Meanwhile, this role was emphasised even better by the effects derived from the war in Ukraine. As the pandemic hit in 2020, the growth drivers of the EU's economy relented, among which the external trade, putting million jobs at risk and leading to rise in unemployment and to depression of economic activity, while many companies had to close down. Competitiveness is a term which increased in significance in the last few decades. Trade competitiveness and, especially, export competitiveness is one of the most valuable variables a country must improve in order to increase its overall competitive position among nations and also the welfare of its citizens. The export statistics of many EU's economies changed since the COVID-19 crisis and later, the war stroke. The research questions this paper addresses are: what is the extent of these changes in which sectors? Have they come to an end or the process of recovery has already started within the EU? What effects has the war in Ukraine onto the EU exports competitiveness? Are there any chances for the EU to maintain its exports competitiveness after these crises? What is to be one and what measures to be taken to recover? After introductory theoretical remarks

and a brief literature review followed by a survey of various techniques to measure export competitiveness, the paper shifts its focus on statistical data and analyse how much damage has the pandemic and nowadays, the war caused to the EU's export competitiveness, and which EU Member States were the most affected, based on statistical data analysis and other various indicators.

Keywords: *Export competitiveness; European Union; COVID-19 pandemic; war; crisis; challenges.*

JEL Classification: *F02; F10; F12; F13; F15; G01; H12.*

1. Introduction

Trade is at the centre of Europe's model of economic prosperity and competitiveness. As stated in the new Trade Policy Strategy set out by the European Commission (2021), the trade policy has a key role to play in the recovery from the COVID-19 pandemic as the pandemic hit the growth drivers of the EU's economy in 2020, among which the external trade, putting million jobs at risk and leading to a rise in unemployment and depression of economic activity, while many companies had to close down.

The European Union is one of the biggest economies in the world and, in order to maintain its position, it is mandatory to be competitive on the international market. This situation represents a real challenge today, when the COVID-19 pandemic' impact can be seen in most of the sectors. We intend to find out how much has the pandemic as well as the war in Ukraine changed the rules of the competitiveness "game".

The study is based on the statistical data on merchandise trade, with the accent being held on export, because trade competitiveness and, especially, export competitiveness is one of the most valuable variables a country must improve in order to increase its overall competitive place among nations and also the welfare of its citizens.

The research questions this paper addresses are: what is the extent of these changes in which sectors? Have they come to an end or the process of recovery has already started within the EU? What effects has the war in Ukraine onto the EU exports competitiveness? Are there any chances for the EU to maintain its exports competitiveness after these crises? What is to be done and what measures to be taken to recover?

After introductory theoretical remarks and a brief literature review, the paper shifts its focus on statistical data and analyze how much damage has the pandemic caused to the EU's merchandise trade in comparison with US and China, and which EU Member States were the most affected, based on market shares analysis.

2. Literature review

Competitiveness is defined as the ability of a firm or nation to offer high quality products and services to the market, while being competitive with others in terms of

price and obtaining a profit after covering the entire expenses occurred in the production process. (quotes and/or source needed) In our study, the concept refers to the products and services sold outside the borders of a particular country.

“Competitiveness depends on the relationship between the value and quantity of the outputs offered and the inputs needed to obtain profitability (productivity), as well as the productivity of the other bidders that exist in the market.” (Economic Point)

2.1. Competitiveness theories – from old to new approaches in international trade

2.1.1. Mercantilism

Although Adam Smith is known as the father of the idea of competitiveness, mercantilism is an economic policy that appeared before him (sixteenth century) and dominated the Western Europe and Africa between sixteenth and nineteenth century. This ideology promotes powerful government regulations that have the aim to bring prosperity by increasing exports. According to mercantilism, a country can be competitive only if it has a surplus trade balance. Many restrictions were imposed on imports and even on domestic consumption, while local producers received subsidies and other protection measures in order to be capable of producing and, therefore, exporting more products. Nations such as Germany, France and England applied this economic dimension of nationalism. (Voinescu and Moisoiu, 2014)

2.1.2. Absolute and comparative advantages

Adam Smith did not agree with the mercantilism approach, specifying that it is impossible for all the nations to become richer at once by exporting their products. This means that some countries must import those products and the protectionist trade policies limited this kind of situations. Instead, he advocated for free trade and specialization: “If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage.” (Blinder, 2008)

David Ricardo improved the absolute advantage of Adam Smith, by adding a new perspective to it. The comparative advantage practically says that a country should specialize in the production of goods in which it has a relative advantage, in fact a lower opportunity cost. (Voinescu and Moisoiu, 2014)

2.1.3. Recent critique to the economic competitiveness at a macroeconomic level

Paul Krugman is vehemently against the conception of economic competitiveness at a macroeconomic level. In his opinion, it makes no sense, because countries cannot compete with each other as well as companies do. (Krugman, 1994) He affirms that a firm may go bankrupt if it does not have enough money to pay the suppliers, workers and bondholders, which is not possible when we talk about a country. Also, nations are not really competing in an economic perspective and they all benefit from selling different merchandise between each other. (Eriksson, 2008)

Table 1: Indicators of competitiveness

Multi-factor/criteria Indicators	Single-factor Indicators
Competitiveness Index (GCI)	Export volume development
World Competitiveness Index (WCI)	Export growth rate development
Doing Business Index (DBI)	Average aggregate exports (exports commodity structure)
Knowledge Economy Index (KEI)	Average aggregate imports (imports commodity structure)
	Relative Balance of Trade
	Export performance
	Net export value development
	Export per capita
	Turnover Transactions TOT
	Unit Labor Costs (ULC)
	Real Revealed Comparative Advantages (RCA)
	Effective Exchange Rate (REER)

Source: Ruzekova, V., Kittova, Z., & Steinhauser, D. (2020), p. 147.

3. Economic Competitiveness in the EU

European Union is one of the most competitive economic and political structures around the world. A large amount of its trade happens between the member states, but also with China, US and other European countries.

In 2019, some of the EU member states were placed in top 10 of the Global Competitiveness Index: Netherlands on the 4th position, Germany on the 7th position, Sweden on the 8th and Denmark on the 10th position. (World Economic Forum, 2020)

We already know that the export competitiveness of many EU's economies changed since the COVID-19 crisis stroke, compared to the previous years, but even though, we will analyze the results regarding trade, in order to make a complete image about the situation.

4. Methodology

The objective of this paper is to explain the concepts of economic competitiveness and to present the current situation of the merchandise trade competitiveness in the EU, considering the impact of the COVID-19 pandemic in the economy.

This goal is obtained by conducting a literature review on the general subject and a case study on some indicators of the merchandise trade competitiveness before the pandemic.

We used the SALSA procedure (Search, Appraisal, Synthesis, and Analysis) to split the research in several steps and gain the most valuable cognitive effects. (Liu, 2017)

Table 2: Methodological process of this study following the SALSA approach

SALSA approach & steps	Steps & details in this article
<p>1. Search</p> <ul style="list-style-type: none"> - finalise research topic, - identify key words, - preliminary literature searches, - full literature searches and reference management, - selection of articles, - obtain articles, - gather the statistical data for the case study. 	<ul style="list-style-type: none"> - topic: Competitiveness and Export Competitiveness, - key words “competitiveness”, “comparative advantage”, “competitive advantage”, “productivity”, “export competitiveness”, and “EU economy”, - preliminary and full literature searches conducted through Web of Science, Google Scholar, SSRN, - download and obtain all articles, - select the statistical data from UNCTADSTAT.
<p>2. Appraisal</p> <ul style="list-style-type: none"> - quality assessment. 	<ul style="list-style-type: none"> - conduct citation analysis on all obtained articles, - review literature and further screen articles, - review full text, - compile a finalised pool of studies for this project.
<p>3. Synthesis</p> <ul style="list-style-type: none"> - integrating previous studies, - using the data for the case study. 	<ul style="list-style-type: none"> - categorize articles into definitions and theories of competitiveness, - identify connections, contradictions, and gaps in the competitiveness literature, - analyze the statistical data to obtain the GVC, RVC and CMS.
<p>4. Analysis</p> <ul style="list-style-type: none"> - analysis & conclusion. 	<ul style="list-style-type: none"> - discuss the export competitiveness based on the reviewed literature and data gathered, - formulate an ecosystematic model, discuss its applications and implications, and suggest future work.

Source: Liu, Chen (2017), p. 113.

Focusing on the overall understanding of the competitiveness and, more concrete, export competitiveness, this article begins with finding the most relevant studies regarding the subject in the first step of the SALSA approach. The authors started it with a literature review of other journal articles, books and chapters of some studies found via Web of Science, Google Scholar and SSRN. (Liu, 2017) The principal key words used were “competitiveness”, “comparative advantage”, “productivity”, “competitive advantage”, “export competitiveness”, and “EU economy”. It is important to mention that in this process was also used the *Global Competitiveness Report*, a ranking of the most competitive countries in the world,

made by the World Economic Forum, and some statistical data from UNCTADSTAT.

We analyzed the citations of the articles from step 1 and read the abstracts, which convinced us about what articles are better to use for this study.

The third step involved a literature review on the term “economic competitiveness”, where can be found a definition, some of the most important theories regarding the subject and information about the results of the EU’s member states in the *Global Competitiveness Report* of 2019, before the pandemic appeared. The following section of this paper, results and discussions, is comprised of a case study in which are presented the merchandise trade competitiveness, particularly the merchandise export competitiveness, of the EU in comparison with the other two biggest economies in the world: China and US.

In the end, step 4 – Analysis refers in the article to the conclusion part, in which we identify the framework of the EU’s export competitiveness nowadays and even suggest a possible new area of research.

5. Results and discussions

In order to answer the paper’s questions, we must provide a general background of the situation. So, we choose to exemplify how EU is doing in trade and export competitiveness by using data over a decade, since before the pandemic stroke until 2020 and comparing the results with China and US. The statistical analysis contains data from a decade, which allows us to interpret the changes that appeared in time and the evolution of merchandise trade and the merchandise export competitiveness.

5.1. Merchandise trade in EU, China and US

Merchandise trade has a crucial importance in the economic growth of a country, because it lowers prices for the consumers, helps creating jobs and challenges the producers to give their best and always offer high quality products in the market. If the companies do not concentrate their efforts in staying competitive, they go pretty soon out of business.

EU, China and US are the biggest economies in the world at the moment and also the most influential players in international merchandise trade. Despite the fact that they are “adversaries” in the competitiveness’ game, each one of them depends on the others in terms of trade, making the largest exchanges of goods and services between them.

China is the only economy from our list that managed to have a steady surplus in the merchandise trade balance during 2010 and 2020. (Figure 1) The reason is that China is a highly industrialized country, which used trade as an instrument to modernize and grow its economy in the last few decades.

Also, it mostly imports raw materials or machineries for the production process, such as iron ore, integrated circuits or crude oil. (Ma, 2021) Chinese people, which represent the biggest labour force in the world, process the input into final goods that are exported cheaper than imported. This is possible because the government has massive dollar reserves in order to maintain the national currency undervalued.

According to Statista, “in 2015, Chinese imports went down by 13.2 percent due to the global uncertainty following several geopolitical conflicts, disease outbreaks, and terrorism.” (Ma, 2021)

The merchandise trade balance in China started with a surplus of 159.434 million of US dollars in 2010, went down to 119.378 million of US dollars in the next year (the lowest value in the entire decade) and began ascending until 584.478 in 2015, when it decreased again for three years. Despite the fact that the COVID-19 pandemic started from China, it did not negatively affect the merchandise trade. Its merchandise trade surplus got to 560.916 million of US dollars in 2020.

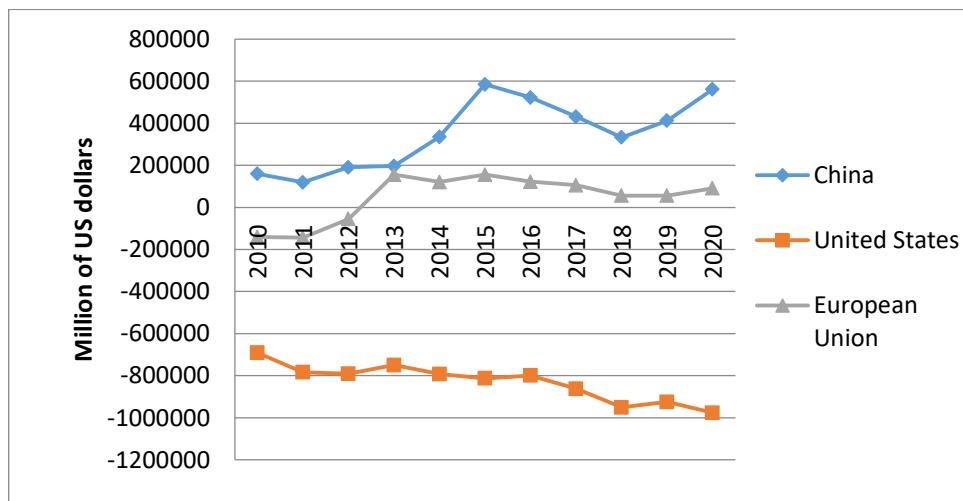


Figure 1: EU, China and US's merchandise trade balance in current US million dollars

Source: UNCTADSTAT.

On the other hand, the data collected from UNCTADSTAT (Figure 1) suggests that European Union experienced some troubles along the way, starting in our study with a significant trade deficit. The effects of the Great Recession of 2008 were still visible and the recovery process took several years. This means that the trade deficit gradually decreased, until in 2013, year in which Croatia joined the EU, reaching a merchandise trade surplus of 155.242,4 million of US dollars. It maintained more or less stable until 2018, with values varying from 120.902 million of US dollars in 2014 to 105.589 in 2017.

In 2018, EU's merchandise trade balance suffered a new loss because imports rose at a way faster rate than exports that year – 6.479.843 trillion of US dollars exports compared to 5.907.717 in 2017, while the value of the imports increased from 5.802.127 to 6.423.891 trillion of US dollars.

Even though UK left the EU at the beginning of 2020, the country remained part of the trade union until the end of the year and EU increased its surplus in merchandise trade in 2020 to 90.937 million of US dollars from 56.148 in the previous year. One of the causes may be that “EU market presented a trade surplus in plastic (+1 million tonnes) and paper (+4.2 million tonnes) materials, indicating a drain of secondary raw materials.” (European Commission, 2021)

US is the only analyzed economy that remained constantly below the line, being during the whole period in a trade deficit. In 2010, the value of its imports was higher than the exports with no less than 690.689 million of US dollars. (Figure 1) However, after that moment, the results went down even more, getting to a merchandise trade deficit of 790.821 million of US dollars in 2012.

The merchandise trade deficit seemed to decrease in 2013, but the difference is small from the previous period and it returned back to it in 2014. In the following years, we can see a stable position in the trade deficit of the US, a little change occurring only in 2018, when the merchandise trade deficit got almost to 1 trillion of US dollars (950.239 million of US dollars) and was even higher in 2020 – 975.916 million of US dollars.

An interesting aspect is that the merchandise trade deficit of the US from the last decade brings some good news. Primarily, the trade deficit reflects growing demands in the United States and around the world. The structure of imports suggests that investment is driving development, which should be reflected in production and employment. The increase in consumer goods consumption is beneficial to the US economy since it reflects rising consumer trust, that should encourage firms to invest and generate new jobs. (Meltzer, 2011) The US affords to adapt this strategy because is practically borrowing from its trading partners.

5.2. Merchandise exports in EU, China and US

Trade is an important factor in the economy of a country, but when we are talking about international competitiveness, we must point out its exports. A nation tends to be competitive when it exports more than it imports, which in our case demonstrates that because of its merchandise trade deficit, US does not have export competitiveness.

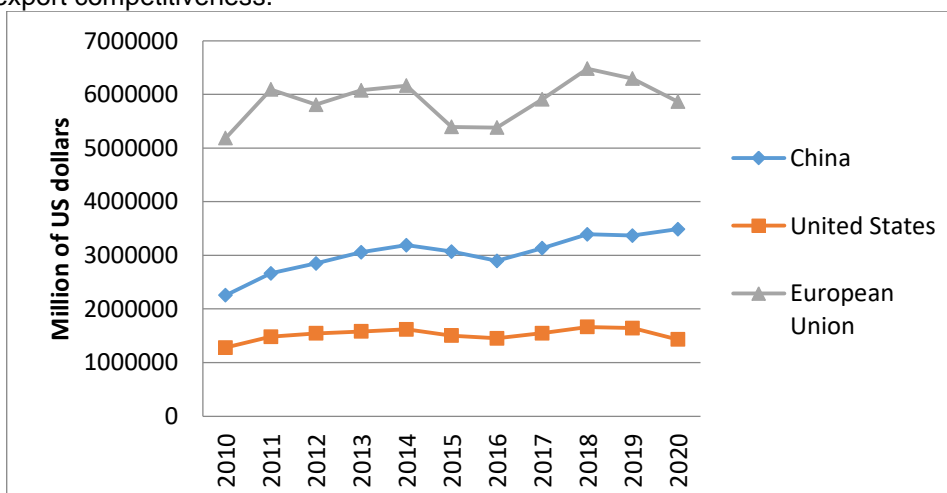


Figure 2: EU, China and US's merchandise exports in current US million dollars
 Source: UNCTADSTAT.

For a better understanding of the export competitiveness of EU, China and US, we explained below the share of exports each one of these three economies has in the world. (Figure 2)

Figure 2 illustrates that despite the trade balance values presented in Figure 1 – where China is situated in the first place; European Union is in fact the leader of exports and, therefore, is the most competitive economy in terms of this indicator. This happens because China usually exports cheap products and raw materials, while EU adds more value to the final goods during the production process.

According to UNCTADSTAT, even in 2010, EU had exports of 5.183.906 trillion of US dollars and they increased to 6.092.183 in the next year. The following years EU's exports experienced little changes, but a huge loss occurred in 2015, when they got to 5.394.903 trillion of US dollars, a difference of 768.918 million of US dollars from 2014.

However, the value of exports got back on track after that moment and reached 6.479.842 trillion of US dollars in 2018 (an increase of 20.11 percent). There was a fall of 185.196 million of US dollars in 2019, but the critical point was hit in 2020, when the EU exports got from 6.294.646 (in 2019) to 5.865.686 trillion of US dollars. It must be underlined that the value was still higher than at the beginning of the analyzed period – 2010, having an overall increase of 13.15 percent in exports. Food, drinks, and tobacco recorded more than one tenth (10.7 percent) of all intra-EU exports in 2020, while their segment of extra-EU exports was much smaller, at 8.6 percent. But from another perspective, the limited supply or complete absence of adequate resources may explain, at least to some extent, why some goods are imported from outside the EU; for example, mineral fuels and related materials accounted for 12.9 percent of all extra-EU imports, particularly in comparison to 4.3 percent of intra-EU imports. (Statistics Explained, 2021)

Germany was the largest exporter of the EU during the entire period of time, with exports of more than 1 trillion US dollars each year, followed by Netherlands with values oscillating from 574.251 million US dollars in 2010 to 674.870 in 2020. An interesting change occurred between France and Italy, considering that France was situated on the 3rd place until 2020, when Italy overthrown it. The difference between the exports of Italy and France in 2020 was of only 7.748 million of US dollars (496.120 million of US dollars compared to 488.372). (The World Bank, 2021)

In 2020, Germany's main export sector was motor cars and components, accounting for 15.5 percent of total exports. Machinery (14.6 percent) and chemical products (9.3 percent) were the second and third major export commodities, respectively. (Destatis, 2021) 8.52 percent of the Netherlands' total annual exports are refined petroleum. With a 6.23 percent share of a worldwide annual export sector, the country is the fourth major exporter. The Netherlands is also the world's seventh-largest exporter of raw aluminum, with a 4.81 percent share. Germany is the preferred destination for raw aluminum exports from the Netherlands, accounting for 40.1 percent of it. (Commodity, 2021)

China has a relatively stable position in the exports sector, gradually increasing its results from 2010 (2.253.916 trillion of US dollars) to 2014 (3.187.756 trillion). The country experienced a little loss in 2016, but recovered immediately from it. "In the wake of U.S. president-elect Donald Trump's win, the yuan fell to nearly eight year lows against the dollar, touching its weakest level since January 2009, amid renewed strength in the dollar. A weaker currency makes Chinese products more

attractive in overseas markets, and the recent plunge helped explain November's strong export performance." (CNBC, 2017)

China's exports value increased overall with 11.35 percent from 2017 to 2020, reaching the point of 3.487.541 trillion of US dollars in the last year (Figure 2), meaning that the pandemic did not really affect it. In addition, countries from all around the world depended on its products, especially the ones for the health industry.

Computer systems, communication technology, and telephones, as well as transportation equipment, account for the majority of Chinese exports. In 2019, the export value of this category was estimated to be at 1.2 trillion US dollars. Food and live animals used for food are also the leading export products when it comes to essential goods. (Ma, 2021)

As of the US, according to Figure 2, there are not many discrepancies in the exports between 2010 and 2020. The maximum value was achieved in 2018 (1.663.982 trillion of US dollars), when the protectionist measures taken by President Donald Trump started to appear. However, we can observe that the exports decreased slowly in the following year, suffering a huge loss only in 2020, the critical moment in which the COVID-19 pandemic stroke.

The drop in the US exports in 2015 reflects the global economy's precarious status. Weaker demand for American vehicles, laptops, and smartphones has resulted from poor worldwide growth. The growth of the US currency was a major factor impeding exports. Because of the dollar's rapid climb, international purchasers were paying more for American goods. When those international sales were transferred back to dollars, they become less value. This drop in exports obscured improvements in other areas of the economy. Consumer spending increased by more than 3 percent in the previous year, because of the strengthening job environment. Also, residential building increased by approximately 9 percent. (Egan, 2016)

6. Conclusions

In conclusion, this paper provides an overview of the export competitiveness of the EU compared to two of the most competitive nations in the world: China and US. When we look at the merchandise trade balance, we can see that China has the biggest surplus, but the EU is leading the exports' value. The reason is that EU produces and sells more expensive goods than China.

The pandemic affected the entire economic sector and EU was not forgotten. However, it managed to keep a merchandise trade surplus in 2020, because its member states limited the imports, reducing the ones made from countries outside of the EU. The exports were lower considering that cars and other vehicle and machinery parts (industries in which the EU is an export leader) did not represent essential goods and were neglected during the crisis.

Nevertheless, the situation recovered significantly in 2021, when governments have taken serious measures to control the damages and help their national companies to get back on business. It is difficult to predict what will happen in the years to come, because, at the moment, we are still in the middle of the pandemic.

There are several factors that influence the outcome, not all of them economic, but mostly sociologically.

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FOREIGN DIRECT INVESTMENT AND THE IMPACT ON EXPORTS AND GDP GROWTH. A BRIEF GLOBAL PERSPECTIVE

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Abstract: *People have been moving from one area to another since ancient times in order to exchange products from one nation with those from another in order to obtain what was lacking in the nation where they resided. These were the first product-to-product trades, and the latter was placed into circulation on money as a product-to-product trade. These early types of commerce have evolved significantly, and they continue to do so now as capital flows from one country to another. This phenomenon, which has influenced worldwide economic growth and improved living standards, saw significant expansion in the twenty-first century in the form of loans used to fund economic development in many nations, as well as ownership of financial assets. In the present era, domestic capital is insufficient for countries to thrive and remain competitive in global markets. For emerging economies, foreign investments that enter the host country as debt or money are crucial financial resources. In this paper, we will discuss the data on the development of exports and FDI of 22 countries from around the world and analysed the evolution of FDI, GDP and exports over a period of 40 years to see trends and patterns of FDI and Exports and their contribution to the economic growth of countries. Broken up in groups, the paper will compare and assess certain countries/regions, grouping and pairing them with economies or countries of similar growth/stance. Corroborating this statistics with recent global events and based on the previous statistics, this paper will try to predict the future trends of FDI around the world.*

Keywords: *FDI, GDP, exports, economic growth, development*

JEL Classification: *F01, F62, F63*

1.Introduction

People have been moving from one area to another since ancient times in order to exchange products from one nation with those from another in order to obtain what was lacking in the nation where they resided. These were the first product-to-product trades, and the latter was placed into circulation on money as a product-to-product trade.

These early types of commerce have evolved significantly, and they continue to do so now as capital flows from one country to another. FDI, or foreign direct investment, is a relatively recent phenomenon across the world. This phenomenon, which has influenced worldwide economic growth and improved living standards, saw significant expansion in the twenty-first century in the form of loans used by the English economy to fund economic development in many nations, as well as ownership of financial assets.

The events of the early twenty-first century have demonstrated that in this globalized society, the possibilities for trade exchanges and offering high-quality services without regard to language or distance are limitless and exceptional. Many different ideas have been evolved through the years to explain the formation or presence of multinational corporations.

Foreign direct investment is becoming increasingly important in modern day society. With the developments, it offers for both countries involved, regardless of drawbacks, FDI is becoming the leading factor for economic development.

In the present era, domestic capital is insufficient for countries to thrive and remain competitive in global markets. For emerging economies, foreign investments that enter the host country as debt or money are crucial financial resources. Throughout history, states, particularly developing countries, have relied on foreign investment to strengthen their economies and continue their development. As a result, they have relied on foreign investors to meet a variety of needs, including technological infrastructure, capital, and expertise, which they lack or have limited access too.

Foreign direct investment represents the transfer of capital, technology and various skills and knowledge. Investments also come with costs not just benefits, but these effects can be hard to identify with high accuracy. In fact, one country's loss might not be another country's gain.

Foreign investment is part of the balance of payments representing transactions between certain areas. In the European Union, FDI has had a major role in post WWII recuperation. It helped the nations heavily impacted by the war and regenerated the European economy.

International statistics measure two important variables of FDI, the flow and stock of FDI. FDI flow measures the amount of FDI that flows into a country in a year and FDI stock is the total foreign productive capacity in the host country. Geamanu (2015) considers that this way the statistics can determine if a country focuses more on exporting or importing FDI, putting a spotlight on their capability to generate profits from "both the account of outflows and inflows of foreign capital as well as on the account of simultaneous inputs and outputs of foreign capital."

Part of globalization is FDI spreading from developed nations to developing nations, which granted developing nations the chance to grow substantially in terms of economics. Exports also increased significantly, since globalization promoted trade between countries. In other words, globalization offered an unmatched opportunity for growth through investment and trade.

Exports and international trade picked up in the 1970s through the mid-1980 when FDI suddenly grew, opening up chances for transfer of technology, expertise and networking. FDI and Exports affected the gross domestic product of the member states as well as they affected each other.

The global financial crisis of the late 2000s put a stop to many economies' growth in the period after 2008 when the consequences were felt by all countries. It can be noted in the change of FDI, GDP and even exports around the time of the financial crisis, as they decreased and struggled in certain countries to pick back up. Some countries like Hungary were also suffering from other issues such as erroneous policies that became obstacles to their economic growth.

A financial crisis is a panic, which affects production and financial sectors, creates instability on global markets, stock market's downfall, currency crisis and leads to a serious decline in economic growth and can potentially pose an economic recession. The 2007-2008 crisis was one of these types, was of a never seen before intensity and affected virtually every country in the world.

Unstable financial sectors can lead to a financial crisis and consequences such as inflation, increase of unemployment rate, public debt increases and loss of purchasing power.

2.Methodology

Brewer & Picus (2014) sees the Compound annual growth rate(CAGR), also known as the cumulative annual growth rate "as a statistic used to express trends in expenditure, revenues or other data over time by providing the annualized rate of change between the base year amount and the final year amount. More specifically, the CAGR is the annual percentage change that when applied to the base year amount and compounded over the number of years between the base year and the final year yields the final year amount."

Formula for compound annual growth rate

$$CAGR = \left(\frac{V_{final}}{V_{begin}} \right)^{\frac{1}{t}} - 1$$

Where:

V_{final} – final value

V_{begin} – beginning value

t – Time in years

Table number four presents the compound annual growth rate for gross domestic product, foreign direct investments and exports alike. As mentioned before, all three are interconnected and influence one another to a certain degree.

CAGR presents the compounded return earned on an annual basis regardless of the individual yearly performance of the amount. Since investments do not behave the exact same way every year, returns can be low and often can be negative too. CAGR presents the information of average returns gained by an amount every year in a certain number of years, however this is not a real return rate, rather it represents how an investment or a fund could grow if it grew the same amount every year. It is one of the most reliable and accurate methods of calculating return on investments over time.

3. World evolution regarding the links between FDI inflows, EXPORTS and GDP

Having discussed what FDI and Exports entail and how they affect the overall economy of a nations and each other, moving on we present the analysis of several groups of countries and the increase of FDI exports and GDP over a 30to40 year period, while linking all three together to show their effect on the economy.

Broken up in groups, we will compare certain countries/regions. In Europe we focus on the eastern and western regions, grouping a few countries from each and pairing them with economies or countries of similar growth/stance.

- a) Europe: Germany, France, Italy and United Kingdom, Czech Republic, Poland Hungary and Romania
- b) North and South America: US, Argentina, Colombia, and Brazil
- c) Asian Countries: China, Japan, India and Australia, Taiwan, Singapore and South Korea
- d) Africa: Egypt, Nigeria, South Africa

Table 1: CAGR for FDI inflow during 1980-2020 expressed in percentage

	Economy/Year	1980-1989	1990-1999	2000-2007	2008-2013	2014-2019
Europe	France	8.15%	19.07%	16.47%	5.16%	3.66%
	Germany	–	0.38%	9.20%	0.95%	1.74%
	Italy	18.70%	6.94%	15.06%	1.80%	3.99%
	United Kingdom	9.07%	6.57%	12.46%	8.81%	4.63%
	Czech Republic	–	26.30%	22.87%	2.87%	5.83%
	Hungary	–	44.91%	19.56%	3.64%	-0.43%
	Poland	–	72.93%	22.01%	7.73%	1.88%
	Romania	–	276.17%	31.35%	4.35%	4.33%
Americas	Argentina	13.28%	21.16%	-0.26%	2.71%	-4.24%
	Brazil	6.97%	10.67%	13.90%	15.79%	1.06%
	Colombia	11.91%	14.39%	22.47%	11.35%	6.41%
	United States of America	20.47%	17.89%	3.09%	12.15%	9.61%
Asia	Australia	11.99%	4.69%	15.74%	10.81%	3.46%
	China	31.97%	24.57%	6.79%	16.72%	8.50%
	India	12.14%	24.69%	26.30%	10.39%	9.10%
	Japan	10.85%	16.69%	12.90%	-2.88%	4.42%
	Taiwan	13.33%	8.98%	12.28%	6.45%	6.77%
	S. Korea	14.54%	23.22%	13.68%	11.38%	4.86%
	Singapore	15.02%	12.90%	18.21%	11.81%	8.71%
Africa	Egypt	16.39%	5.42%	12.31%	5.54%	6.36%

	Nigeria	11.86%	10.16%	5.80%	8.21%	4.02%
	South Africa	-6.90%	18.85%	14.88%	10.48%	1.40%

Source: authors own computation based on the statistical data from UNCTAD statistics data center Foreign Direct Investment: Inward stock, annual <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>

Table 2: CAGR for GDP evolution during 1980-2020 expressed in percentage

	Economy/Year	1980-1989	1990-1999	2000-2007	2008-2013	2014-2019
Europe	France	3.87%	1.64%	3.46%	1.02%	2.03%
	Germany	–	2.16%	2.15%	1.66%	2.77%
	Italy	6.88%	0.62%	3.34%	-0.26%	1.61%
	United Kingdom	5.08%	4.40%	2.89%	0.82%	1.50%
	Czech Republic	–	4.78%	9.54%	-0.27%	6.01%
	Hungary	2.49%	2.81%	9.02%	-0.98%	5.48%
	Poland	3.69%	9.92%	6.71%	1.16%	4.49%
	Romania	4.55%	-1.14%	15.39%	-0.33%	6.75%
Americas	Argentina	0.16%	7.21%	-0.01	10.90%	-0.04
	Brazil	6.99%	3.86%	0.10	7.84%	-0.05
	Colombia	1.70%	6.10%	0.10	9.55%	-0.03
	United States of America	7.04%	4.92%	0.04	2.66%	0.03
Asia	Australia	6.31%	2.80%	11.62%	7.86%	-0.98%
	China	4.07%	10.74%	14.39%	15.81%	5.38%
	India	4.98%	3.44%	12.07%	8.63%	5.96%
	Japan	10.70%	3.83%	-0.99%	0.46%	0.78%
	Taiwan	13.70%	6.19%	2.63%	4.28%	2.22%
	S. Korea	14.21%	5.79%	9.29%	5.53%	1.74%
	Singapore	10.03%	8.30%	8.23%	9.70%	2.82%
Africa	Egypt	5.01%	9.83%	4.12%	10.44%	0.89%
	Nigeria	-13.63%	-0.36%	18.80%	8.85%	-2.97%
	South Africa	1.77%	1.75%	10.12%	5.04%	0.04%

Source: authors own computation based on the statistical data from UNCTAD statistics data center Gross domestic product: Total and per capita, current and constant (2015) prices, annual <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96>

Table 3: CAGR for exports evolution during 1980-2020 expressed in percentage

	Economy/Year	1980-1989	1990-1999	2000-2007	2008-2013	2014-2019
Europe	France	4.24%	3.31%	3.12%	1.75%	3.21%
	Germany	–	2.77%	6.58%	2.28%	3.24%
	Italy	5.88%	2.97%	4.19%	0.81%	3.06%
	United Kingdom	3.13%	4.95%	2.89%	0.82%	1.50%
	Czech Republic	–	5.78%	13.99%	2.92%	4.31%
	Hungary	2.50%	10.02%	11.13%	0.30%	4.45%
	Poland	0.01%	7.28%	11.45%	4.52%	7.36%
	Romania	-0.65%	4.47%	17.36%	7.00%	6.31%
Americas	Argentina	1.74%	6.59%	9.86%	2.88%	-0.52%
	Brazil	5.54%	4.61%	10.23%	4.65%	2.21%
	Colombia	3.23%	4.88%	14.03%	3.52%	-0.27%
	United States of America	6.01%	6.11%	21.67%	7.40%	1.43%
Asia	Australia	5.98%	4.17%	10.23%	4.65%	2.21%
	China	–	14.44%	21.67%	7.40%	1.43%
	India	6.05%	8.41%	18.98%	7.21%	1.96%
	Japan	7.79%	3.64%	5.41%	-1.20%	0.73%
	Taiwan	12.98%	3.56%	6.28%	3.39%	-1.69%
	S. Korea	12.85%	5.85%	10.40%	4.50%	-1.45%
	Singapore	8.59%	4.73%	9.99%	4.21%	1.11%
Africa	Egypt	1.60%	2.56%	12.86%	-2.41%	2.13%
	Nigeria	-11.02%	2.27%	15.73%	1.66%	-3.12%
	South Africa	-1.07%	1.42%	11.79%	1.64%	-0.83%

Source: authors own computation based on the statistical data from UNCTAD statistics data center Goods and Services (BPM6): Exports of goods and services, annual <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=89795>

Several economic events happen on the mentioned time period, all of them affecting the indicators one way or another and the economies, some having to opt for rescue plans or development plans to boost the economy.

The Russian ruble crisis around the same time and the Asian crisis and the 1994 Mexican “Tequila” crisis were some of the most hard-hitting economic events of the 90s. The consequences of the la 90s followed economies into the 2000s, with a little period of growth in the mid-2000s before the financial crisis of the late 2000s happened, later the mid-2010s oil price hike and the pandemic as of late 2019.

For the first and second group, Europe's countries are chosen, some founders and developed economies and some developing economies that adhered later to the European Union. The first two decades show fluctuation and low growth for the developing economies.

The difference between the growth of developed and developing countries is clearly shown in the tables representing the CAGR, while the developing countries show higher growth rates, the developed countries' economies are far ahead of them making recovery from global economic events much easier for developed nations.

Eastern Europe's Groups is made up of developing economies, showing increases of FDI stocks above 20% and up to 270% for Romania between 1990 and 1999. The second decade is similar with double-digit increases while the last two are single digit increases, Hungary being the only one to record a negative 0.43% increase in the last decade.

The last two decades proved to be tough in regards to economic wellbeing of the nations, as lingering effects from the first two decades follow into the next years. The 2000s and the 2010s show some struggle for a number of economies GDP wise as they struggle to overcome the impact of the financial crisis only to be hit with the oil price hikes of the mid-2010s. As an example, the Czech Republic struggles to recover the GDP to the pre-crisis number all throughout the 2010s up until the end of the decade. Hungary is in the same situation along with Poland, Romania succeeds in recovering the GDP by 2014 only to be once again lowered by the oil price hike.

FDI Stocks are less affected by the economic events, the only year recording decrease for all countries being 2014 for the Eastern European countries selected. Exports for these countries are less affected in the 90s and early 2000s, mostly recording growth until the financial crisis, 2009 noting negative growth for all countries. The mid 2010s and 2019s are also heavily littered with negative growth for all 22 countries.

For Western Europe, the economic events came with negative effects as well. The economies were affected but being on a higher level than the rest of the countries, they generally recorded less negative growth. The table might show less annual growth however the economies are far more developed and

North and South America are represented by the United States, Brazil, Argentina and Colombia. The contrast is clear regarding economic differences as the US is one of the world's biggest economies and one to experience the biggest economic boom, while Argentina, Brazil and Colombia are Latin or South America's biggest emerging economies with vast potential for growth.

GDP in the 80s and 90s for the American countries are relatively free of negative growth with the Latin American countries recording some occasionally, while the US is on a constant growth all the way to the 2008 financial crisis. The rest of the countries experience negative growth during the late 90s and early 2000s due to several events such as the: the Asian crisis the Mexican crisis and ruble crisis and the oil price collapse.

Exports are less stable during the first 2 decades, with a little more fluctuation but relatively well maintained. The US records two negative growths in the early 80s before the start of the economic boom, which propels its exports into constant growth until the financial crisis. The other three countries record some decreases in exports in the late 90s. The 2010s are rough for Brazil and Colombia who record 5 and 4 years, respectively, of consecutive negative growth. The decade ends with both registering once again decreases while Argentina and the US remain on a growth.

FDI stocks are similar, the 80s and early to mid-90s record growth until the aforementioned economic events take place and the early 2000s record some negative impact. The late 2010s once again see some decreases in FDI due to issues with the global oil prices.

The American countries might have been less affected by overall economic events of the last 4 decades; however, the prominent ones are all the same. Financial crises and oil price collapses are dangerous to any economy because the global economy is invested in them heavily.

Next group comprises Australia with Asia's most known economies: China, Japan and India. The Asian countries here are not affected by the Asian crisis, with China going strong regarding FDI and only registering growth over the 40 years.

Exports wise the first two decades are dominated by growth, with one or two years recording negative growth. Australia is the only affected by the late 1990s crises. The next decade's crises affect the exports but the countries bounce back the following year. The mid 2010s bring mostly negative growth for Australia and China, the latter being affected by the feud with the US as well.

FDI stocks are very stable over the 40-year period, China only registering growth while the rest record some decreases from time to time, Japan being the only one affected by the Asian crisis and the oil price collapse. The FDI stocks are steadily growing in the late 2010s as well.

Regarding GDP, all countries record some decreases, but overall they are on the rise. The late 1990s crises only affect India, Australia, and the financial crisis of 2008 affects Australia. The same two countries are less steady in the late 2010s, however China and Japan held up against the economic events of the last 2 decades.

Another set of Asian countries make up group 5: Taiwan, Singapore and South Korea. They record mostly positive GDP for the 80s and 90s as the majority of the countries from the groups. The last two decades are less positive with the decreases around the same economic events, oil price collapse and Asian crisis of the late 90s, the financial crisis and the mid-2010s oil price issues.

Exports are similar to the GDP in all 4 decades, besides Taiwan who has several years of decreases in a row in the 2010s. FDI stocks are fairly stable with Taiwan recording some more decreases in the last two decades.

The last group rounds up with some African economies: Egypt, Nigeria and South Africa. Their exports are fairly similar to the rest of the countries with and record the same decreases in the last 2 decades around the oil price crisis of the late 90s and the financial crisis and the mid-2010s oil price crisis. Egypt was affected more in the 2010s, recording decreases several years in a row.

GDP wise Nigeria records negative growth mostly in the 80s and 90s while the other countries record mostly positive like the previous groups. Egypt is affected by both oil price crises and is not affected by the financial crisis regarding GDP. Regarding FDI, Nigeria and Egypt both record positive growth in the 80s and 90s, while South Africa has some negative growth in the early 80s and is affected by the late 90s crises. The 2000s and 2010s are fairly positive, with the late 2010s recording some decreases, mostly for South Africa.

4.Conclusions

All countries are affected by the same periods of time and virtually the same crises. The late 1990s Asian Crisis, the oil price collapse and the financial crisis of 2008 along with the oil price crisis of the mid-2010s. The most global of issues can affect any countries and FDI and Exports are no perfect economic sectors, even if some countries succeed in avoiding the consequences completely. Now the economy can be affected by other events that might not occur globally, just nationally, and such the GDP can vary despite the other indicators positive stance.

It is best to keep an eye on all possible crises incoming and conjure a plan that can withstand at best crises that could otherwise drive economies into bankruptcy as seen with Greece.

Global economy has evolved and the FDI booms of the late 1900s are over, however the developing countries attract more and more FDIs promising growth for the global economy whilst maintaining as much of the evolution as it can. For now, the pandemic definitely affected all indicators and all economies and will continue to show some influences for a period undetermined. However, as much as economies have suffered, they will grow much more in the future.

The pattern seems to be similar for most countries with the period from 2000-2019, the financial crisis essentially stopping double digit FDI stock growth for the European countries, while the rest of the countries selected suffered the same after the oil price crisis of the mid-2010s. FDI growth has been disturbed the last decade to the point where some countries did not recover the peak they had before the 2008 crisis or before the oil crisis of the mid-2010s. While countries will recover, the direction of FDI might present some changes, as data suggests, developing countries might receive more and more FDI overall.

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TRADE OPENNESS, INVESTMENT FREEDOM- SELECTED COUNTRY RISK INDICATORS, IMPACT ON FOREIGN DIRECT INVESTMENTS, A PANEL VECTOR AUTOREGRESSION MODEL APPROACH

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Abstract: *We employ a panel vector autoregression model (PVAR) selecting as endogenous variables Foreign Direct Investments percent of GDP, Trade Openness and Investment Freedom for a database comprised of European Countries. The data are collected from the Global Economy database. We compare different PVAR models changing the input of desired lags. We test the Hansen test for over-identifying restrictions and we generate the Generalised impulse response functions. The article uses a Hahn Kuehrsteiner Panel Var estimation estimating a stationarity PVAR with fixed effects. Econometric analysis shows a significant impact of trade openness and investment freedom indicators on foreign direct investment in Europe.*

Keywords: *trade openness; investment freedom; foreign direct investments, panel vector autoregression model*

JEL Classification: *F63, E02, F00, F23*

1. Introduction and literature review, country risk

Thinking about the conflicts in the Middle East, recurring coups in the Arab Spring, the ongoing conflict in Ukraine, asset seizures by local governments and disputes over natural resources between nations, these may pose unique political risks to international business, but may still affect the local business of firms and may not be imaginable in the future. "When it comes to political risk, we say that it could be defined to some extent by its unpredictability" (Lamourelle, 2021). Rodriguez (2016) defines political risk from the definition given by the World Bank as "the risk associated with government acts that I) reduce an investor's or owner's right to use or profit from its assets and II) reduce the value of the firm.

Country risk refers to the country's governance and changes in political stability over time, as well as its level of militarization, population heterogeneity and demographic stress. Country risk can also be distinguished by the extent of a country's history of human development. The environmental footprint also serves as an indicator of country performance. Finally, the extent to which a country has

fostered both positive and negative international linkages and its location in hostile regions are useful indicators of country risk (Carment, 2001). Country risk synthetically reflects a country's risk status, which in international business refers to risks arising from national differences in economic structures, policies, natural environment, and social culture, risks that can alter the return prospects of a particular investment or transaction (Feng et al., 2018a, 2018b).

Geopolitical risk is defined by Caldara and Iacoviello (2022) as the risk associated with wars, acts of terrorism and tension between states that affect the normal course of international relations. Geopolitical risks encompass both categories of risks, the first category being the risks of these events materializing and the second category - the risks associated with the escalation of existing events. These risks include various conflict situations, disruptions, terrorism, etc. Howell (2016) argues that it is important to distinguish 'political risk' from 'country risk'. Country risk includes, in varying proportions, financial risk and economic risk. Other authors, such as Cheng et al (2018), equate geopolitical risk with political risk. Political risk, he argues, is the risk that an investment's return might suffer as a result of political change or instability in a country. Instability affecting investment returns could result from a change in government, legislative bodies, other external decision-makers or military control. Political risk is also known as 'geopolitical risk' and manifests itself as the time horizon of investments becomes longer.

2. Research methodology

The general objective of the paper is to analyse the impact of country risk on foreign direct investment in Europe on the basis of Global Economy statistical database- while the specific objectives are derived from the general objective and concern, on the one hand, the identification of the main components of country risk from the point of view of the literature, economic, political, social, environmental, operational, etc. components with an impact on foreign investment and, on the other hand, to conduct econometric research on the impact of country risk on foreign direct investments (FDI), substantiating and statistically validating the impact of the country risk components, identified, defined and mapped under the first partial objective, on FDI. The period of analysis is 2000-2020, and the countries analysed are 27 EU Countries.

3. Econometric analysis

To investigate situations of complete endogeneity, where there is a two-way causality between the variables considered in the specification of the model, the estimation of the effects of country risk on FDI is carried out using panel VAR (Vector Autoregressive Model) models. The panel VAR models analysed are also useful because they generate so-called generalised impulse functions, which are simulations of the dynamic impact, over a ten-year analysis period, of a shock to one variable (FDI or trade openness or investment freedom) on the evolution of the other variable (the effect of FDI on trade openness, the effect of trade openness on investment freedom or the effect of increased FDI inflows on

themselves, how the FDI stock will evolve in one year, in two years, ... , in 10 years, i.e. the autoregressive component, etc).

Modelling the impact of political risk indicators on the stock of FDI (from inflows) on the basis of VAR (Vector Autoregressive Models):

Vector autoregressive models (VARs) are simultaneous equation models in which there are situations of complete endogeneity, i.e. there is two-way causality between all variables considered in the model specification. Estimation is done using the Generalised Method of Moments (GMM) estimator, in Panel VAR (Dynamic Panel VAR estimation), the two-step GMM estimator, these effects occur with a certain lag and we consider this lag to be 1. We consider FDI, trade openness and investment freedom index as endogenous variables in the construction of a Panel VAR model resulting in a system of 3 simultaneous equations. In the equation with FDI as the endogenous variable, its value this year depends on its own value last year and the value of trade openness (TradOpen) and trade freedom (InvestFreed) last year. In the equation for trade openness, we have this year's trade openness depends on last year's FDI value, its own lagged value and last year's value of the investment freedom index. In the equation for InvestFreed, this year's InvestFreed depends on last year's FDI value, plus it depends on last year's trade freedom value and its own lagged value.

Table 1: Modelling the impact of political risk indicators on the stock of FDI (from inflows) based on VAR vector Autoregressive Models

	"First difference GMM estimator" Dynamic Panel VAR estimation, two-step GMM		"Collapsed first difference GMM moment conditions and forward orthogonal transformation" Transformation: Forward orthogonal deviations			
	FDIGD P	TradeOpe n	InvestFree d	FDIGD P	TradeOpe n	InvestFree d
lag1_FDIGDP	0.7697 *** 0.0664	0.0505 (0.0352)	0.0455 (0.0510)	0.7809 *** 0.0608)	0.0836 ** 0.0323	0.0649 0.0377
lag1_TradeOpe n	0.3169 * 0.1450	0.6974 *** 0.0963	0.1050 0.1938	0.3102 0.1814	0.6601 *** 0.1083	-0.0213 0.1418
lag1_InvestFree d	-0.0128 0.263	0.0440 0.1903	0.7215 ** 0.2770	0.1138 0.1646	-0.0560 0.0794	0.7940 *** 0.1119

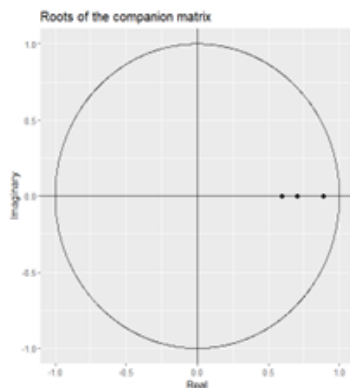
t statistics in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Source: data processed in R language by the author

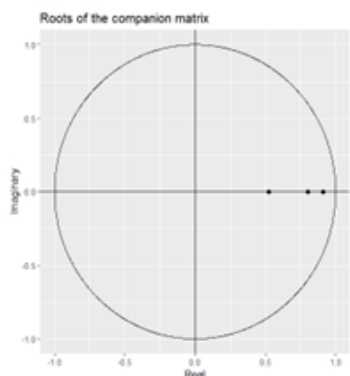
It is possible to estimate the model either with the data as reported by the indicators, as in the model above, or by first applying an orthogonal transformation to the model to remove some of the extreme effects. In reporting this estimation of the VAR model, the model reports the Hansen test, and also reports the stability conditions of the VAR , i.e. it shows that the unit root roots for the VAR are in this circle of -1, 1, showing that there are no problems with the presence of unit root effects in the panel data.

Figure 1: Conditions of VAR stability



Source: VAR stability estimation in R language by the author

Figure 2: Conditions of VAR stability (orthogonal transformation of data)



Source: VAR stability estimation in R language by the author

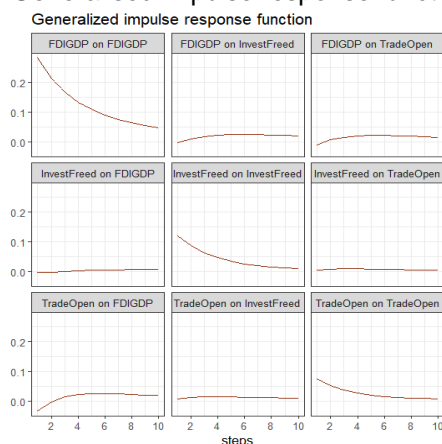
Even with this orthogonal transformation, it is observed that there are no unit root problems, the points are positioned in the unit root circle.

The VAR model also generates so-called Generalised Impulse Functions, which are simulations of the dynamic impact of a shock to one variable on the evolution of the other variable, i.e. a ten-period estimate. If we analyse the Generalised Impulse Function (GIRF) graphs, we see that even with the orthogonal transformation the impact of the variables is approximately the same as in the previous estimation without orthogonal transformation. And these plots are estimated under *ceteribus paribus* conditions.

These Generalised impulse functions exemplify in the situation of increasing FDI stock inflows in year-2020, how the FDI stock will evolve in one year, in two years etc... in 10 years-2030, how exactly the effects induced by a shock to the FDI stock at this year's level for the following periods will propagate to itself, i.e. the autoregressive component. It can be seen that there is, according to the estimates of this model, a short-term shock, i.e. there is an increase, if this year's FDI has

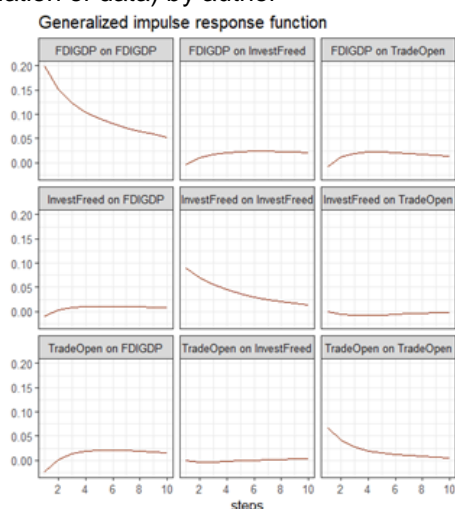
increased there is immediately a significant impact on next year's FDI, but in the medium and long term it tends to decrease, exemplifying the fact that an investment in FDI does not translate for example immediately into production, some time has to elapse from FDI and the realisation of production.

Figure 3: Generalised impulse response functions (GIRF)



Source: VAR estimation of generalised impulse functions in R

Figure 4: Generalised impulse response functions (GIRF) (with orthogonal transformation of data) by author



Source: VAR estimation of generalised impulse functions in R by author

The effect of the increase in the stock of FDI on the investment freedom index tends to be absorbed, so that in the medium and long term the market mechanisms have allowed a shock to be "swallowed" and return to equilibrium levels, i.e. the transmission of the shock is not necessarily persistent in the

medium and long term, the amplitude is not large, it is stabilised around 0. The effect of trade openness on FDI induces in the short term a slight decrease, followed by a slight increase which is then absorbed by the market mechanisms, causing the evolution to stabilise at equilibrium levels in the medium to long term. The model also estimates PVAR stationarity with the Hahn Kuehrsteiner estimator, in which the variables are demanded- i.e. the mean is also extracted from the FDI stock, and the mean is also extracted from the trade openness variable, and the mean is also extracted from the value of the investment freedom index. The effects obtained are shown in the table below, stationarizing the data by extracting the mean.

Table 2: Hahn Kuehrsteiner Estimator for VAR stability

[1] "stationary PVAR with fixed effects-Hahn Kuehrsteiner Estimator"			
Hahn Kuehrsteiner Panel VAR estimation			
Transformation: demean			
	demeaned_FDI	demeaned_TradeOpen	demeaned_InvestFreed
demeaned_lag1_FDI	0.8943 *** (0.0174)	0.0296 (0.0484)	0.0350
demeaned_lag1_TradeOpen	0.2508 *** (0.0054)	0.8673 *** (0.0149)	0.0071
demeaned_lag1_InvestFreed	0.0379 *** (0.0076)	0.0069 (0.0211)	0.8393 ***

*** p < 0.001; ** p < 0.01; * p < 0.05

Source: Hahn Kuehrsteiner Estimator for VAR stability in R by author

4. Conclusions

From the wide range of econometric models in the literature, we have selected those models that best capture the complex nature of the impact of country risk on foreign direct investment, analysing also the dynamic evolution of the phenomena, performing 10-year simulations of the effect of the dynamic impact of the country risk components on FDI, analysing situations of complete endogeneity, when there is two-way causality between the variables considered in the model specification.

Econometric analysis shows a significant impact of trade openness and investment freedom indicators on foreign direct investment in Europe. The article suggests that FDI flows are going to countries with institutions that support the trade openness and investment freedom. Second, multinationals are found to be attracted to countries with low restrictions on international trade, a thesis consistent with vertical FDI models. The results of the study contribute to the literature that points out that business and business-friendly institutions attract multinational investment.

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THE ECONOMIC FREEDOM, COUNTRY RISK AND FOREIGN DIRECT INVESTMENTS

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Abstract: *The interlinkages between country risk and foreign direct investments are the subject of research interest. The article tests the intuitive hypothesis that economic freedom is associated with low country risk and is an incentive for foreign direct investments. The research paper employs empirical quantitative within-between models to analyze the relationship between foreign direct investments and five indices: trade openness, freedom from corruption, trade freedom, investment freedom, and economic freedom. The database used is The Global Economy for 44 European Countries resulting a panel data employed for between within models, growth curve models, contextual models, generalized estimating equations models (GEE), and asymmetric effects models. Interesting is the different significance of the five indicators in different models. For the first three models within -between model, the growth curve model and the contextual model- statistical significance have trade openness, freedom from corruption, and investment freedom. For the Generalized equations model (GEE) the only indicator that has statistical significance is Investment freedom. For the asymmetric effects model that shows the effect of asymmetric increase and decrease of each indicator, there is no statistical significance for the analyzed indicators. The within – between models combine the robustness of the fix effects models with the flexibility of the random-effects models.*

Keywords: *economic freedom; country risk; foreign direct investments*

JEL Classification: *F63, E02*

1. Literature review, country risk

In defining country risk, there are multiple approaches: i) Das and Niyogi (2021) define country risk as an indicator of business risk within a country, attributed to economic, demographic, political, legal and social factors of that country; ii) A collection of risks related to a country, depending on the economic situation and political situation, affecting the status of countries, used only to assess and rank countries (Okay, 2018); iii) A risk related to investment in a particular country and the ability or inability of the country to repay its financial obligations. It also highlights the stability and profitability of the country and the lower risk of default (Gupta, Kaur and Sarva, 2020); iv) It is the risk that the political and/or economic

situation in a country will affect the amount of investment in that country (Ayhan, 2019).

Moosa (2002) defines "country risk as the exposure to economic loss in transnational operations caused by events in a particular economy", events that are "within the control of the government", these events can be high inflation, deterioration in the current account of the balance of payments, increase in external debt. Events can also be political, such as government interference or breach of contract, but both political and economic events have their origin in politics, and therefore the author considers political risk or country risk as the cause of these losses in cross-border operations. Rodriquez (2016) assesses country risk through the following elements: (i) transfer and convertibility risks, (ii) restrictions on currency convertibility exchange rate risk, (iii) confiscation, expropriation and nationalization of foreign assets, (iv) war and political violence, and (v) the risk of government default on its debts-sovereign risk.

2. Aim of the paper and research methodology

The general objective of the paper is to analyse the impact of country risk on foreign direct investment in Europe on the basis of statistical database-ICRG-International Country Risk Guide, provided by the most prestigious political risk assessment institution-Political Risk Service PRS Group, while the specific objectives are derived from the general objective and concern, on the one hand, the identification of the main components of country risk from the point of view of the literature, economic, political, social, environmental, operational, etc. components with an impact on foreign investment and, on the other hand, to conduct econometric research on the impact of country risk on foreign direct investments (FDI), substantiating and statistically validating the impact of the country risk components, identified, defined and mapped under the first partial objective, on FDI.

The research method takes into account the identification of econometric models that capture the complex influence of country risk components on FDI, such as the mixed nature of the influence of country risk as measured by mixed linear between-within models that combine the advantages of "fixed effects" models (robustness to the presence of time-invariant effects) with the flexibility given by "random effects" models. The research results support, through the variety of econometric models used, the hypothesis of the significant influence of the analysed country risk components on foreign direct investment. Each model used offers its own perspective on explaining the influence of country risk, In the within-between models it is observed that all indicators: corruption perception index, trade openness, investment freedom index and economic freedom have a positive and statistically significant influence on foreign direct investment. The "growth curve" models demonstrate the existence of a statistically significant temporary effect coding each time period within the analysis horizon 2000-2020. In this time period, the economic crisis of 2007-2010 and the Covid pandemic 2020-2021 occurred and the effect resulting in the "growth curve" model suggesting the existence of shocks in the analysis period impacting the dependent variable under

analysis FDI is plausible. This model is chosen as the best analysis model also from the perspective of economic sense, with the lowest reported values for AIC and BIC (Bayesian Information Criterion and Akaike Information Criterion) among all the linear mixed models analysed.

The dependent variable used is the FDI input stock, calculated as a percentage of GDP. In the econometric estimation we used this indicator to eliminate the effect of differences in the size of the economies of the reporting countries. The independent variables of interest are: corruption perception index (FreedCorr), trade freedom (TradeFreed), trade openness (TradeOpen), investment freedom index (InvestFreed), economic freedom (EconFreed).

3. Econometric analysis

The within-between models show that all indicators of trade openness, corruption perception index, trade freedom index, and investment freedom index are statistically significant and positive, indicating an increase in FDI by the coefficient value with a one unit increase in the independent variable. The only indicator with a negative coefficient value but no statistical significance is the economic freedom index. Of all the indicators analysed, the trade freedom index has the largest impact on the evolution of the FDI; when trade freedom increases by one percentage point, the FDI increases by 2.67%. The second indicator in terms of impact on the evolution of FDI is trade openness, but the impact is significantly lower than in the case of trade freedom representing a 0.71% increase in FDI when trade openness increases by one percentage point.

The "growth curve" models include a temporary effect, which is statistically significant in the model under analysis and indicates the existence of shocks within the analysis period that have an impact on the dependent variable. are invited to use figures and tables in your paper wherever they will help to illustrate your text. The proceedings are delivered to conference participants in electronic format and therefore support colour figures, however, the book version is printed in black and white and therefore you are advised to refrain from using colours to deliver important information in your figures.

3.1. Modelling the impact of country risk indicators on the stock of FDI (from inflows)

The within-between models show that all indicators of trade openness, corruption perception index, trade freedom index, and investment freedom index are statistically significant and positive, indicating an increase in FDI by the coefficient value with a one unit increase in the independent variable. The only indicator with a negative coefficient value but no statistical significance is the economic freedom index. Of all the indicators analysed, the trade freedom index has the largest impact on the evolution of the FDI; when trade freedom increases by one percentage point, the FDI increases by 2.67%. The second indicator in terms of impact on the evolution of FDI is trade openness, but the impact is

significantly lower than in the case of trade freedom representing a 0.71% increase in FDI when trade openness increases by one percentage point.

Figure 1: Modelling the impact of country risk indicators on the stock of FDI (from inflows)

	Linear Mixed Effects Specification: within-between	Linear Mixed Effects, Specification Within-between Growth Curve Models	Linear Generalized Estimating Equations Models Specification on within-between	Linear Mixed Effects Specification: Contextual
	0.71***	0.18	-0.15	0.71***
FeedCorr	0.42***	0.47***	0.22**	0.42***
TradeFreed	2.67***	1.61***	0.93**	2.67***
InvestFreed	0.21**	0.01	-0.10	0.21**
EconFreed	-0.44	-0.88***	0.18	-0.44
		Contextual effects		
(Intercept)	-3.88	-72.41***	-1.19	-3.88
lmean(TradeOpen)	1.31***	1.31***	1.32***	0.61**
imean(FeedCorr)	-0.15	-0.15	-0.07	-0.57
imean(TradeFreed)	-2.65	-2.64	-3.24**	-5.32
imean(InvestFreed)	-0.02	-0.03	0.21	-0.24
imean(EconFreed)	3.36	3.37	3.01	3.79
time		0.03***		
Pseudo-R ² (fixed effects)	0.54	0.56		
Pseudo-R ² (total)	0.86	0.88		
AIC	895.98	793.82	QIC 410.27	
BIC	957.15	859.7	QICu413.58	
Standard Dev Residual	0.375	0.3497		

Source: data processed in R language by the author

The "growth curve" models include a temporary effect, which is statistically significant in the model under analysis and indicates the existence of shocks within the analysis period that have an impact on the dependent variable. Between 2000 and 2020 there were some shocks that impacted FDI in the FDI recipient countries. Considering that this period saw the economic crisis of 2007-2010 and the Covid pandemic 2020-2021 it is plausible that the resulting effect in the "growth curve" model highlights that this time dummy variable is statistically significant. The feature that differentiates these models from the other models

considered in the analysis is the introduction of this dummy variable that codes for each period within the analysis horizon

Each year in this period under analysis signifies the change in the macroeconomic environment in which countries operate and consequently the manifestation of shocks that are temporary - time-dependent in the period under investigation, also reflected by μ_t in the regression equation. In the regression equation there are also those days that reflect time-invariant factors. The growth curve model reports the same type of information as the between-within model above except that it adds that time dummy variable, which is statistically significant. In the Growth Curve models, as in the within-between models, we observe that the trade openness, corruption perception index, trade protection index, and investment freedom index are statistically significant and positive, indicating a percentage increase in the FDI with the coefficient value when the independent variable increases by one percentage point. Similar to the previous situation in the Within-Between models the only indicator with a negative coefficient value but this time statistically significant is economic freedom, indicating a 0.88% decrease in the stock of FDI when there is a 1% increase in economic freedom, the data being logarithmic 0.88% represents the elasticity of Y with respect to X.

R² is also reported in the results table. The model in its entirety explains around 86% of the evolution of the dependent variable in the case of within-between models and 86% in the case of Growth Curve models. The models also report information on $\epsilon_{i,t}$ as the standard deviation. The smaller the standard deviation of the residual error, the more accurately the model is estimated. BIC and AIC-Bayesian Information Criterion and Akaike Information Criterion (AIC) are used to rank the models. The lower the values for these two information criteria, the better a model is in terms of economy. The best model based on AIC and BIC is the Growth Curve Model, which is why it has been interpreted in more detail.

Estimation is also done by the semiparametric Generalized estimating equations (GEE) technique with within-between specification. In the GEE model, only the corruption perception index and the trade protection index have statistical significance. A one percent increase in the corruption perception index implies a 0.22% increase in the stock of FDI at a statistical significance threshold of 5%. A 1% increase in the trade protection index implies a 0.93% increase in the FDI stock. And in the case of the semiparametric GEE estimation with within-between specification, similarly to the other two Linear Mixed Effects models with within-between and contextual specifications, the largest impact on the evolution of the FDI stock is still on the trade protection index, but the magnitude of the effect of increasing FDI is much smaller, 0.93%, compared to 2.67% in the first model and 1.61% in the second model.

One version is that of a contextual model where the "trend" (mean) is not extracted from $X_{i,t}$. β_2 reflects the differences between within and between effects at the level of i entities: a significant level of this parameter indicates that these differences are substantial. In the model, β_2 is significant at the 5% significance level for T, reflecting that there are substantial differences between the within and between effects of the trade openness variable.

4. Conclusions

The research method took into account the identification of econometric models that capture the complex influence of country risk components on FDI, such as the mixed nature of the influence of country risk as measured by mixed linear between-within models that combine the advantages of "fixed effects" models (robustness to the presence of time-invariant effects) with the flexibility given by "random effects" models. The research results support, through the variety of econometric models used, the hypothesis of the significant influence of the analysed country risk components on foreign direct investment. Each model used offers its own perspective on explaining the influence of country risk, In the within-between models it is observed that all indicators: corruption perception index, trade openness, investment freedom index and economic freedom have a positive and statistically significant influence on foreign direct investment. The "growth curve" models demonstrate the existence of a statistically significant temporary effect coding each time period within the analysis horizon 2000-2020. In this time period, the economic crisis of 2007-2010 and the Covid pandemic 2020-2021 occurred and the effect resulting in the "growth curve" model suggesting the existence of shocks in the analysis period impacting the dependent variable under analysis FDI is plausible. This model is chosen as the best analysis model also from the perspective of economic sense, with the lowest reported values for AIC and BIC (Bayesian Information Criterion and Akaike Information Criterion) among all the linear mixed models analysed.

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TURNING PERCEPTIVE VOCABULARY INTO CONTEXT VOCABULARY IN BUSINESS ENGLISH

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Abstract: *Language is made up of five basic components: morphology, phonology, syntax, semantics and pragmatics. Morphology in linguistics represents the study of the words, how they are formed and their relationship with other words in the same language; phonology involves the rules regarding the structure of the speech sounds and their sequence; syntax is the study of morphemes and how they form larger units; pragmatics involves the rules for appropriate and effective communication; semantics deals with vocabulary and the way concepts are expressed through words. Thus, vocabulary is one of the constituent elements of the language. Words carry meaning and have their own energy representing the building blocks of communication. According to the context they are used in, their meaning differs, therefore, vocabulary acquisition is crucial when talking about English for Specific Purposes, in our situation, Business English. But how is vocabulary acquisition in second language done? Vocabulary building often occurs through reading, however, it is unlikely for the students in foreign language to acquire the basic specific vocabulary through reading. The present paper deals with the strategies a Business English teacher approaches in order to assist students to learn vocabulary as well as to equip them with methods to turn perceptive vocabulary into context vocabulary. How can vocabulary be taught efficiently? How can teacher provide learners the needed input in order to shift vocabulary from input to output? How can teachers introduce vocabulary in order for optimal retention to be ensured? These are some the questions the present paper addresses.*

Keywords: *teaching Business English; vocabulary; innovation; on-line technologies.*

JEL Classification: J60

1.Introduction

Teachers and students alike have always been concerned with vocabulary acquisition, which is actually the process of learning new words. This is an important part in foreign language learning, vocabulary being considered as central in language teaching, having an enormous importance to a language learner. According to Steven Stahl "vocabulary knowledge is knowledge; the knowledge of a word does not only imply a definition but also implies how the word fits into the

world“. „Vocabulary is an essential building block of language as such it makes sense to be able to measure learners'knowledge of it“. (Schmitt, Schmitt & Clapham). Thus, vocabulary represents one of the most important elements of language learning and teaching as it affords students to access all forms of oral and written communication of the word, being also a “fundamental facet of literacy skills“. (Pulido & Hambrick). Teachers propose a vast variety of meanings for the term vocabulary. To some, it represents sight-word vocabulary, meaning the immediate recognition of words by students; others describe the term as the words understood by students; and to some others vocabulary represents the understanding of the heard or spoken words. „*The content teachers further describe it as an academic vocabulary that reflects the content-specific words or students' understanding of the oral and print words*“ (Antonacci & O'Callaghan, 2011).

Another definition provided by other teachers regard the term as the knowledge that the learners should have about the meaning of words, oral or written; thus, knowledge comes in at least two types, receptive and productive. The receptive vocabulary is what students understand and recognize, while the productive vocabulary is what students can write or speak. To Hiebert and Kamil (2005), “*the productive vocabulary is a set of words that are well-known and used frequently by the learners in speaking or writing. The receptive vocabulary is a set of words, which are less frequent and for which learners assign meanings while listening and reading*”.

Words, phrases, collocations and idioms are indispensable in taking shape of both receptive and productive language learning skill. Therefore, knowing words is a multidimensional and complex construct and the purpose of the teachers is to use the most effective strategies that improve the learners' vocabulary in order for these to develop skills like speaking and writing. The discussion goes on with the strategies the teacher provides, in order to move vocabulary from input to intake. Once the word is learnt, how do students achieve long-term retention for easy retrieval for future communication? How can we best introduce new words and practice them to ensure the optimal retention?

2. Vocabulary as the Basis of Communication

Nothing can be done without words, vocabulary being the basis of communication. Jamalipour and Farahani (2012) strengthen the importance of vocabulary by saying that it is the main communication tool. Compared to another aspect of the language, the vocabulary seems to be more useful and more urgent than grammar. Successful communication depends on the vast vocabulary acquired in a language. Considering this, Schmitt (2000) emphasizes that lexical knowledge is crucial to communication and Nation (2001) describes the link between vocabulary knowledge and language practice as complementary. They are interrelated: the skill of vocabulary enables language use and vice versa. The use of the language leads to an increased vocabulary knowledge. However, long before the 1980 there have been a prominent interest in vocabulary learning and teaching. Beginning with 1987, due to the vast quantities of lexical research, vocabulary has acquired a prominent and legitimate place within applied linguistics. Thus, vocabulary is one of the constituent elements of the language. Researchers such as Maximo (2000),

Marion (2008), Nation (2001, 2005), Susanto (2017) and many others have come to the conclusion that the acquisition of vocabulary is central for the successful use of a foreign language and it plays a very important role in the formation of written texts and complete spoken texts. In 2000, Maximo stated a lot of reasons for giving special attention to vocabulary acquisition. The mastery of a language depends on the vocabulary's diversity, having no rules that the learners should follow like in the case of syntax and phonology. In 2001 Nation stated that *'learning vocabulary items plays a vital role in all language skills, such as listening, speaking, reading, and writing.'* Alqahtani continues in 2015 arguing that *'the acquisition of an adequate vocabulary is essential for successful foreign language use because without an extensive vocabulary, a language learner will be unable to use the structures and functions we may have learned for comprehensible communication.'* Vocabulary is considered to be a reflection of social reality. There are four reasons for saying that. Richards (2001) theorises these four reasons:

- the primary function of language is to allow interaction and communication;
- the language is a system for the expression of meaning;
- the structure of language reflects its functional and communicative uses;
- the primary units of language are not merely its grammatical and structural but categories of functional and communicative meaning.

Believing that the language is made up of symbols representing human thoughts and feelings, then, the reality of human thoughts seems to be grasped only through the language. Thus, the word choice in our communication is definitely determined by our experience. The word choice produces and perceives emotions which are contextually linked to the situation where, when, and how they are communicated and received.

Language is made up of five basic components: morphology, phonology, syntax, semantics and pragmatics. Morphology in linguistics represents the study of the words, how they are formed and their relationship with other words in the same language; phonology involves the rules regarding the structure of the speech sounds and their sequence; syntax is the study of morphemes and how they form larger units; pragmatics involves the rules for appropriate and effective communication; semantics deals with vocabulary and the way concepts are expressed through words. Words carry meaning and have their own energy representing the building blocks of communication. According to the context they are used in, their meaning differs, therefore, vocabulary acquisition is crucial when talking about English for Specific Purposes, in our situation, Business English. But before thinking about designing programs based on specific vocabulary teaching, teachers need to understand the vocabulary challenge faced by the learners of English, as a second language. Among the other languages spoken around the world, English probably contains the greatest number of words, which makes learning its vocabulary an incredibly harsh task to do. There are many other languages which routinely create new words by adding a prefix or a suffix (Spanish) or which just combine two or more simple words together into a longer compound word (German). In these languages, by understanding the system underlying lexical constructions, learners can create and use a large number of new words. Up to a certain level, English utilizes the same system of word creation. But on a larger scale, learners have to acquire a considerable number of words that do not have an underlying forming pattern. However, the difficulty students

face when learning English vocabulary should be put into context. The Webster's New International Dictionary (1961) mentions 54,000 or so word families appearing in English and even educated native speakers will know a fraction of this number (around 20,000). The good news is that researchers have found out that it is possible to function in English with vocabularies smaller than this. Adolphs & Schmitt acknowledge the fact that in order to participate in basic everyday oral communication, knowledge of the most frequent 2,000-3,000-word families provides the necessary lexical resources. Second language learners with a knowledge of the most frequently used 10,000 words are considered to have achieved enough vocabulary to cope with the challenges of university studies in a second language. Albeit vocabulary is not the only element that conveys meaning, there are some other vital features like grammar, intonation, stress, rhythm, pauses, silences and tone of voice. Wilkins states that "while without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Wilkins, 2020). So, the key of successful communication lies in the knowledge of a large number of words. According to Nation (2001), we can talk about three dimensions of lexical knowledge that a word has: form, meaning, and use. Form refers to pronunciation and spelling; meaning refers to structure of words, ideas, and preferences; and use refers to knowledge of syntax, collocation, and constraints in use. Schmitt has put it into a simpler way: vocabulary knowledge is depicted as the ability to recognize the components of words and as the receptive and productive expertise and fluency. (Schmitt, 2014)

When we talk about English for Specific Purposes, learners need to focus on a specific field of study and obviously the criterion to choose the target word selection is the frequency of occurrence. Words that occur frequently in English are typically the most useful one and they are the first to be acquired by the students. It is absolutely clear that the most frequently used words represent the essential foundation on which language use is based and it is needed to be learnt regardless of the effort. The question that arises is the following: how does receptive vocabulary turn into productive vocabulary when talking about Business English? There has been a lot of research on the issue of the students' levels of perceptive vocabulary and productive vocabulary but the research on methods regarding turning receptive vocabulary into productive vocabulary has been limited.

3. Perceptive Vocabulary

Perceptive or receptive vocabulary of a person also known as 'receive' represents the number of words that are generally understood when they are heard, read or seen. Students are in receptive control of the words that they understand when they hear them or read them. When vocabulary is taught, learning is likely to be receptive as teachers tell the students the meaning of the word, provide definitions and use the new word in a sentence. Thus, perceptive vocabulary knowledge represents the capacity of the students to comprehend a spoken or written word. Receptive activities, such as matching words to their definitions, looking up new words in a dictionary and learning from word pairs are most commonly used by teachers in order to enlarge the students' vocabulary, being more common than cloze exercises or writing tasks.

4. Productive Vocabulary

On the other hand, the productive vocabulary represents the knowledge to produce a word when the learner can use it in writing or speaking. Students are in productive control of words when they use them to express themselves in speech or in writing. The first step is the perception of words and only after intentional learning they become available for their productive use. It is stated that first, the students know vocabulary words receptively and only after a while they become available for their productive use. The vocabulary items that the students recognize and understand are receptive vocabulary items whereas the lexical items that the students deploy in their communication and writing are productive vocabulary words. There are two basic skills, speaking and writing, that make use of the productive vocabulary. Thus, we can say that the productive vocabulary is regarded as a process of active word because learners can generate words in order to express thoughts and feelings.

5. Relations between receptive vocabulary knowledge and productive vocabulary knowledge.

There are various assumptions about the connection between receptive vocabulary and productive vocabulary. According to Webb (2013) when students study a word receptively, the impact is on the receptive vocabulary; when students learn a word in productive way, the results accounted for are both for the receptive and the productive knowledge. The receptive knowledge competence regards to both listening and reading skills, while the productive knowledge competence is concerned with speaking and writing skills (Schmitt, Schmitt & Clapham, 2001). Moreover, adequate vocabulary knowledge facilitates learning of target language and at the same time determines the extent to which the learner is capable of using the language (Nation, 2001). According to Melks Teichrow “receptive knowledge gradually becomes productive when the students learn more vocabulary items on the topic “ (M., Teichrow, 2012). Vocabulary knowledge encompasses receptive and productive knowledge. However, students studying Business English, and not only, face the fact that limited vocabulary knowledge hinders effective communications and represents a great challenge when it comes to express themselves in writing, especially when we talk about carrying out academic tasks that are usually written. Most prominent researchers in the field came to the conclusion that vocabulary can be divided into active vocabulary – vocabulary that can be used and call it orally and passive vocabulary – vocabulary formed of words known through recognition but cannot be called and produced through writing. This categorization of vocabulary seems somehow to limit it to its function, meaning and word structure. Henriksen has divided knowledge of vocabulary into three parts: the level of meaning and understanding, the level of relationship between words, and the level of learner’s control and access to knowledge about the word. The discussion goes on and Nation has broadened the construction of vocabulary knowledge by combining form, represented by pronunciation and spelling, with meaning represented by structure and meaning of the words, ideas, preferences and use represented by syntax, collocations and constraint in use. Schmitt claims that vocabulary knowledge can be assessed by means of learner’s ability to gain,

understand, remember and retrieve the items. Due to the fact that vocabulary knowledge is multi-faceted, language teachers must have a more comprehensive approach to vocabulary development, in order for the students to reach a higher quantity of productive vocabulary. Thus, the students' ability to identify spelling in the written form of a word will precede the ability to spell correctly, as well as the ability to identify and recognize the written form may precede the ability to convey meaning. On the other hand, teachers must know that it is also likely to spell words correctly and use the right words with grammar before the meaning of the word is understood. In other words, we have productive vocabulary knowledge in written aspect or productive vocabulary knowledge in grammatical function before receptive vocabulary knowledge in form and meaning. Therefore, it is absolutely necessary to distinguish between receptive and productive knowledge in every aspect of vocabulary knowledge if we want to study and understand the productive vocabulary knowledge. After all, our ultimate goal is to bring learning vocabulary in the form of oral or written communication. In 2013 Webb claimed that "*the study of a word receptively only gives impact at the meaning in receptive while learning vocabulary in productive way, the results accounted for receptive and productive knowledge*". Thus, both prove to have a strong relationship in the development of vocabulary, especially in improving the learners' language efficiency. As a consequence, both teachers and learners benefit from teaching/learning vocabulary when they completely understand the aspect of vocabulary knowledge and its process being understood.

Research in the domain of vocabulary acquisition brought to light two problems: acquisition through direct vocabulary instruction and incidental vocabulary acquisition. Intentional vocabulary acquisition refers to activities that have the final target the development of the vocabulary mainly. Incidental vocabulary acquisition refers to learning word as the by-product of something else, such as reading for comprehension. Language professionals have been continuously debating whether students should be taught Business English words individually, directly or in the context, meaning the presentation of a word in a sentence. But even if most vocabulary is learned from the contexts teachers present in class, one should not conclude that this could represent the fastest and most efficient way of learning specific vocabulary. By learning words in the context, the students acquire not only the phonetic, syntactic and semantic rules but also how to use that certain term properly in a context. Also, in the case of definition-based learning or synonym or translation in the native language, the students become familiar with just one meaning of the word which leads to a shallow level of word knowledge, not increasing the comprehension of the text that contains the word in discussion.

6. Ideas on how to boost productive vocabulary in Business English classes

During the years we have conducted a study regarding the development of Business English vocabulary learning (receptive as well as productive) among different groups of students, in different learning situations. The methods used have been different, ranging from focus on learning vocabulary in context (listening), teach vocabulary items in realistic contexts (reading), maximize students' speaking time on a given topic, giving presentations on a given topic, role plays, etc. Among these, one of the most relevant group has been the one where

the effectiveness of mobile learning on developing vocabulary knowledge has been tested. The study has brought to light the idea that both receptive and productive vocabulary knowledge has been developed among university students. We will not get into details about all the findings of all the studies that have been conducted, but we will reveal the conclusions that can be drawn:

Multimedia, referring to a number of combinations of text, sounds, graphics, and video or animation, increases the speed and enhances the retention of vocabulary when words occur in different current situations that are presented. Moreover, it provides easy access to glosses, helping the students decode the meaning of specific words through images, it provides students with the option for viewing the materials in either visual or verbal modes, according to the students' individual learning styles. As Mayer & Sims said "*learners who possess high spatial abilities benefit more from multimedia than those who have low spatial abilities*". Yet, multimedia is highly debated in terms of bringing or not benefits to students. Studies have been undergone during the years and Lewalter (1997), Weidenmann (2002), Hoffler and Leutner (2007) and Abdulrahman and Faruk (2020) have supported the use of multimedia in Business English classes, in order to turn perceptive vocabulary into productive vocabulary. Although the ability of a corrective feedback is limited in the situation of multimedia, there have been a number of benefits mentioned in the studies above such as the students' ability to self-assess, self-monitor, and increase motivation.

Authentic Visuals and Oral and Written Texts

Authentic materials are generally defined by Galloway as "those written and oral communications produced by members of a language and culture group for members of the same language and culture group". These authentic materials capture the multiple nuances of a word that cannot be otherwise recorded or conveyed, providing an appropriate sociocultural context for the students to read, seem and feel the real language purposefully.

Deeper Level of Processing

When a task requires a higher degree of need and evaluation, thus creating a higher involvement load, a deeper level of processing occurs, having as a result a better word retention. Deeper learning tasks require the students to follow a multiple set of operations to complete the task. This means that, in order to obtain the learning of information, it is not enough to read the content but to process it, think about it and reflect on the content. The Depth/Levels of Processing Hypothesis (stated first in 1972 by Craik & Lockhart) implies the fact that the more attention and manipulations a word receives, the higher the chances of storing the vocabulary in long memory are. Word associations are reinforced when students are asked to manipulate words, relate them to other words and to their own experiences and justify their choices. As a result, critical thinking and problem solving are greatly enhanced. Information-gap activities, jigsaws, word-puzzles are effective in using a higher-level thinking skills like analysis, synthesis, and paraphrasing.

Incidental Learning and Direct Vocabulary Instruction represent two main sources of meaningful vocabulary; the first one refers to learning without having the intention to learn while the second one refers to a systematic demonstration of ways to determine the meaning of unknown words. Studies show that explicit vocabulary instruction was found to be more effective regarding vocabulary

acquisition in comparison with incidental learning as it resulted in greater and faster gains and a better retention. When reading, vocabulary acquisition is higher if it is supported by vocabulary-focused activities. Therefore, in order to optimize vocabulary learning in Business English classes, as well as turning perceptive vocabulary to productive vocabulary, teachers should provide the students vocabulary exercises before, during, and after reading the texts. There are some activities that can be suggested: highlight essential words in the text, provide vocabulary exercises that include the new vocabulary, identify words that are not connected to the topic under discussion etc. The teaching of vocabulary can be also integrated in the context of writing, as the writing process provides a space for learners to think about the words that can best convey the idea they have. This cannot be done in speaking, as the speaking process requires immediate reaction to convey ideas.

7. Conclusions

Lexical knowledge has a decisive role in Business English acquisition. Among all the linguistic competences required to be proficient, the lexical competence is the first to be mentioned in *The Common European Framework of Reference for Language Learning, Teaching, Assessment (Council of Europe, 2001)*. Vocabulary plays an important role in the use of the language, being considered the heart of language skills. Moreover, it functions as the basis of communication, reflection of social reality, emotion booster and academic ability predictor. The language skill performances are based on the perceptive and productive vocabulary, having different contributions, along with the principles of teaching vocabulary, the materials used and the selection of the methods used. When teachers choose the vocabulary-learning tasks, we must take into consideration the degree of knowledge of the word since each lexical unit involves different aspects. Not all these aspects are always available. They can be incorporated gradually and progressively. Information regarding productive vocabulary knowledge aspects also provides information and guideline for teachers in developing and adopting appropriate methods and instruments in Business English classes. The support of the teachers can serve as a catalyst to encourage students in the use of the new words. Motivation, desire and environmental control must be given the necessary attention in order to ensure successful use of productive vocabulary knowledge.

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FROM GENERAL TO PROFESSIONAL ENGLISH – CURRICULUM, STUDENTS, TRAINERS

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Abstract: *The present study is an attempt to offer a bird's eye view into the relationship between professional English, meaning English for Specific Purposes (ESP) and English for General Purposes (EGP) or 6General English (GE), stressing the difficulties that may appear on the road. There are opinion discrepancies regarding the differences that exist/do not exist between Business English teaching and General English teaching. Therefore, the general purposes and distinctive features are examined to draw a parallel between ESP and EGP to present their common and specific characteristics.*

Keywords: *EGP, ESP, professionals, learners, curriculum*

JEL Classification: *Y80*

1.General background

The starting assumption is that general English is commonly used for day-to-day conversations, whereas professional English is learned and used for specific purposes. The difference between the two kinds of English as a communication method is why people are learning the language. Some researchers argue that no differences between English for Specific Purposes teaching and General English teaching can be defined. However, when defining the ESP, it proves different from General English, at least in the role of the teacher, course design, teaching models, etc., leading to diversified teaching methods employed to achieve the expected teaching goals.

1.1 Brief terminology clarifications

There has been a growing demand for English for specific contexts, so courses were designed to meet these specific needs, and thus new ideas started to emerge in the study of language. Traditionally the aim of learning a new language had been to communicate with people worldwide, and the focus had been on rules of usage; English has become the language for worldwide communication. Communication has become more refined and specific, and new studies shifted attention away from referring to the formal features of language usage to finding how language is used in honest communication (Widdowson 1981). These new

requirements, along with developments in educational theories, contribute to the rise of ESP (English for Specific Purposes). Business English is an area of ESP, as it shares essential elements (needs, syllabus, and course design).

General English (GE) is a syntagm used to describe the type of English required for everyday situations. It can be compared to more specific English teaching such as Business English, English for Academic Purposes, Engineering English, and so on. It aims to give language learners a consistent foundation in core grammar and communication. In addition, it focuses on developing basic skills - reading, writing, listening, and oral- through various topics.

English for Specific Purposes (ESP) - the general umbrella covering vast fields, Business English included - underwent several stages in being defined after the 1960s when the conceptual term appeared.

Mackay and Mountford (1978:2) state that "ESP is generally used to refer to the teaching of English for a utilitarian purpose."

Hutchinson and Waters (1987:19) considered ESP an "approach," not a different or particular type of language, which does not require different teaching materials or methodology.

Nevertheless, Peter Strevens (1988:1-2) defines English for Specific Purposes by distinguishing between its absolute and variable characteristics.

Robinson (1991:2) claims that students learn *English "not because they are interested in the English language or English language or English culture as such, but because they need English for study or work purposes."

Anthony (1997:9-10) considers that "some people described ESP as simply being the teaching of English for any purpose that could be specified. Others, however, described it more precisely as the teaching of English used in academic studies or the teaching of English for vocational or professional purposes."

Dudley-Evans and St. John (1998:4-5) propose a more precise definition noting that ESP contrasts with general English.

Basturkmen (2006:18) states that in ESP, "language is not for its own sake or for the sake of gaining a general education, but to smooth the path to entry or greater linguistic efficiency in academic, professional, or workplace environments."

As an intermediary conclusion, there are differences between GE and ESP.

1.2. Types of ESP

According to Brunton (2009:22), "ESP is today more vibrant than ever with a bewildering number of terms created to fit the increasing range of occupations that have taken shelter under the ESP umbrella." Traditionally, ESP is divided into two main categories: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). In 1983 David Carter identified three types of ESP: English as a restricted language (i.e., language used by waiters or traffic controllers), English for Academic and Occupational Purposes, and English with specific topics. According to Carter's classification, both English for Academic Purposes (EAP) and English for Occupational Purposes (EOP) fall under the same umbrella of ESP. Nevertheless, there is no clear distinction between EAP and EOP, as Hutchinson and Waters (1987:6) write: "people can learn and study simultaneously: it is also likely that in many cases the language learned for immediate use in a study environment will be used later when the student takes

up, or return to, a job." The same source distinguishes three main categories of ESP: English for Science and Technology (EST), English for Business and Economics (EBE), and English for Social Studies (ESS).

Furthermore, each category mentioned earlier falls into subcategories of English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). However, irrespective of its subdivision, the main goal of an ESP is to help learners understand and communicate in any situation, especially in their working environment. Therefore, according to their goals, learners should be channeled to acquire the language that best serves the needs of their occupation.

1.3. Features of General English and Business English as part of ESP

Stevens (1988:1-2) states ESP can be defined by making a distinction between its absolute and its variable characteristics. The fundamental characteristics of ESP are listed as follows: designed to answer particular needs of the learner; related in content (i.e., subject and topics) to specific domains, working environments, and activities; centered on the language appropriate for those activities in syntax, lexis, discourse, and semantics; designed in contrast with General English.

On the other hand, according to the same source, two variable characteristics may be attributed to ESP but not necessarily: 1. restricted as to the language skills to be learned (reading only); 2. not taught according to any pre-ordained methodology.

As mentioned above, Dudley-Evans and St. John (1998:4-5) consider that ESP contrasts with general English and adds more variable characteristics. Accordingly, three fundamental characteristics are as follows:

- ESP is defined as meeting the specific needs of the learners,
- ESP makes use of the methodology and activities of the discipline it serves,
- ESP is centered on the language (grammar, vocabulary, register), skills, and discourse particular to these activities.

The variables of ESP are related to or designed for specific disciplines, and it may use a different methodology from that of GE; ESP is generally meant for intermediate or advanced learners, ESP is more likely to be designed for adult learners due to some professional work situations; however, it may also be meant for secondary school students.

Widdowson (1983) considers there are distinctive features of ESP and GE. Thus, he enumerates the most important features of General English: the focus on education, the difficulty in deciding upon course content as learners' needs are hard to predict, the purpose is to convey general English competencies, etc. On the other hand, the most relevant ESP features are the focus on training and the more accessible selection of the appropriate content as the needs of the course audience is clear; the clear objective may be to create a restricted English competence.

2. Differences between General English (GE) and English for Specific Purposes (ESP), including Business English (BE)

There have been changes in how researchers, course designers, teachers, and trainers consider ESP and BE versus GE. For example, in the late 1960s and early 1970s, unique vocabulary was considered to distinguish English for Specific Purposes and Business English from General English.

Another approach considers training the skills of communication in English speaking, writing, listening, and reading within a business context essential. In the 1980s, following the trends in GE, BE teaching emphasized more and more the functional areas-formulaic language for recommending, giving opinions, showing agreement, and so on. In addition, during the 1980s, the development of company training programs began to provide employees with opportunities to attend courses in presentation techniques, negotiating, and effective meeting skills. Nowadays, English for Specific Purposes, like the one for the working environment, is highly recognized as a crucial discipline.

2.1 Differences in goals

Starting from definitions, where goals are general purposes learners will be able to accomplish by the end of a program, and objectives are the ones achieved in a course or lesson, we understand that they are included in a curriculum to provide a clear definition of the direction, to guide trainers, teachers, providers on one hand and learners, students, receivers, on the other hand, as well as material designers. (Richards 2001).

The goals for learning English constitute the significant difference between ESP and EGP. The learners are also an essential factor that makes the difference between the two variants of English.

ESP learners are usually adults who are familiar with English and need specialized language to communicate professional information and perform some job-related functions. Thus, they are highly motivated to study as they know their specific purposes for learning English. (cf. Chris Wright, 1992)

By analyzing learners' needs, materials designers figure out the language skills helpful in accomplishing professional tasks; for instance, for an accountant, more numbers, charts, and digits should be focused on. Consequently, the specialized language needs context is taught in real-life circumstances, either a dialogue for a tourism specialization or a contract for international trade, etc.

Compared to ESP learners, the EGP ones differ even from the age point of view; thus, children are targeted, not adults who are already conscious of their needs. Thus, addressing younger learners, EGP courses are mainly focused on grammar, language structure, and general vocabulary. These courses are meant to develop the general language, preparing them to cope with the language in any job-related tasks. EGP courses approach varied themes, subjects, and topics, whereas all four skills are trained.

2.2 Differences in the role of teachers and trainers

The role of the language teacher has evolved from a model in traditional language teaching to a facilitator in contemporary language teaching.

It briefly refers to the fact that the methodology used, and the approached techniques determine the role of the teacher or trainer. In both GE and ESP, or more precisely BE, the teacher should assess the current language level of the learner, select materials, and set tasks that are appropriate to the level and context. Teachers need to set course objectives and establish the course program. To achieve these, teachers ought to have an in-depth knowledge of the language system in terms of skills, functions, structures, and vocabulary. Both positions require the transmission of communicative competence to learners, the GE teacher in social settings and the ESP teacher in a professional or academic setting; learners should be fluent in conversations; thus, the GE teachers rely on grammar and vocabulary in everyday situations, whereas the ESP teachers rely on language in context for fluency in the professional conversations. GE teachers need to be able to impart general knowledge, while ESP teachers need to impart field-specific language knowledge. GE teachers use ready-made syllabus materials such as textbooks and working books. ESP teachers analyze learners' needs, make special material preparations, sometimes design a specific-field syllabus, and help learners handle subject concepts encoded in domain-specific texts. Consequently, there is a difference in the training of GE and ESP teachers, as the latter need to add field-specific linguistic competency to the prior content knowledge, which means that more is needed to be a qualified Business English teacher.

Swales (1985) uses the term 'ESP practitioner' to designate the facilitator of specialized knowledge rather than the 'ESP teacher' to highlight the difference between an ESP and a GE teacher. In BE, the tendency is to employ 'trainer' because some BE trainers come from a business background or have worked for companies themselves and have valuable knowledge of how companies are organized and run, which adds value to the language knowledge.

All in all, ESP teachers, as language teachers, should perform the essential functions of any teacher: organizer, assessor, prompter, participant, and controller doubled by the additional specific linguistic competency facilitator. Besides qualifications, the BE trainer should be aware that the audience will consist of adults; thus, an outgoing personality, interest in interacting with people, and curiosity about all aspects of business, are desirable; this is the best way for the trainers to unlock the learners' motivation and learning potential.

2.3. Differences in curriculum and course design

The curriculum and course design refer to the process of turning raw data about a learning need into programs and materials that will lead the learners to a certain level of knowledge. In other words, this is the use of theoretical and practical information to conceive a syllabus, then to create, select, and adapt materials following the syllabus, to develop a methodology for teaching those materials, and provide assessment methods by which progress to the specified goals will be measured.

The course design for GE focuses on general topics connected to culture, literature, and linguistics. At the same time, ESP concentrates on materials and themes related to language application in different specific environments, such as business communication in a business context.

There are three main approaches to ESP course design: language-centered course design, skills-centered course design, and learning-centered course design (Hutchinson and Waters (2002).

Language-centered course design begins with the learner's needs and proceeds through various stages of analysis to a syllabus, selection of appropriate materials, and evaluation of performance following the goals. One of the major flaws of this model is that learner counts only in the first phase, that of recognizing the needs, and not throughout the process as it should be thus, it is not learner-centered.

Skills-centered course design is an approach that assumes to take the learners more into account as compared to the language-centered approach. The skills-centered approach is based on two fundamental approaches: theoretical and pragmatic. The theoretical principle states that language behaviors are specific skills and strategies learners use to produce or comprehend discourse. Therefore, such a course will focus on its learning objectives and consider them in terms of performance and competence.

The pragmatic approach of the skills-centered course design is the outcome of the classification provided by Widdowson (1981), who distinguished between goal-oriented and process-oriented courses. The ESP course strives to overcome all the disadvantages of this approach, focusing on the process rather than the goal; the emphasis is not on reaching specific goals but on enabling the learners to accomplish as much as possible. The most valuable idea is that the ESP course should help learners to develop and train abilities and strategies that will continue to refine even after the ESP course finishes. The skills-centered approach is considered to take the learner more into account than the language-centered one; nevertheless, it still treats the learner as a language user rather than the /learner of the language.

The learning-centered approach, compared with the first approach where the learner is almost invisible, and with the skills-centered approach, which takes the learner into account very little as well, gives the most concern to the learners enhancing the transmission of information, the learning. Learning is a process in which the learners use knowledge or skills to make sense of the flow of new information. Learning is an internal process that builds upon the already acquired knowledge and relies on the ability and motivation to use it. The third approach seems the best of the three as it takes account of the learner at each stage of the design process as a dynamic one, as needs and resources may change over. Following the feedback, the course design may suffer changes and adaptations. The ESP real-life learning situation determines the nature of the syllabus, materials, methodology, and evaluation procedures.

3. Conclusion

Based on the analysis above, there is no clear-cut separation line between GE and ESP; people use syntagms such as Business English, English for engineers, or Medical English to make a distinction. We consider that the two are closely interconnected, and a possible answer to the difference between them is that the practice makes the difference: "in theory nothing, in practice a great deal" (Hutchinson et al., 1987).

The syntagm BE is used to cover the English taught to a wide range of professional people and people undergoing training and education preparing for a business career; thus, the focus is both on language and equally on skills training in the process of teaching. This is a challenge for teachers and trainers nowadays as they realize the utmost importance of assessing the needs and selecting the most appropriate material for those needs, as well as with the learners' goals at all stages of materials production and the learning process. The part of BE trainers in the process is even more striking as they are responsible for settling on a syllabus and selecting materials while developing a consciousness of the needs and concerns of businesspeople and remaining flexible enough to respond to those needs. There is no 'best' methodology; nevertheless, when the learner is at the center of the learning, it makes the whole process the most productive. In BE teaching as part of the ESP, a desirable approach would be to combine language and real situations related to the working business environment.

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SECTION MANAGEMENT, MARKETING, ECONOMIC,
INFORMATICS AND CYBERNETICS

ANALYSIS OF THE ONLINE PURCHASE BEHAVIOUR OF
ROMANIANS

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Abstract: *In recent decades, technological development has experienced significant acceleration, and smart devices are now widely available. Romanian e-commerce market, although ahead of countries like Greece, Portugal, Italy or Bulgaria, has still a long way to go before reaching its full potential. The purpose of this paper is to analyse the online shopping behaviour of Romanians. For this, we analyzed statistic data on internet access and online purchases and discussed the findings of an online purchase behaviour survey of 580 Romanian respondents. The main findings of the survey suggest that, while 64 percent of respondents prefer online shopping to the classic non-virtual shopping, the top three risks that worry potential online Romanian buyers are: fake online reviews, uncertain quality of goods, and unreliable match. 5G technologies, ultra-fast smart devices, lack of borders in online commerce are already present, so the future belongs to those who will know how to adapt and anticipate the needs of online shoppers.*

Keywords: *e-business; consumer behaviour; online purchase*

JEL Classification: L81, M21

1. Introduction

Unquestionably, the world we live in is constantly changing. Things we consider commonplace today, were hard to imagine thirty years ago. Widespread access to information, mobile Internet, home and mobile assistant, online shopping or pay by credit card or phone are today part of our day to day life, but probably would have seemed straight out from sci-fi movies three decades ago.

In its relatively short history, Internet has revolutionized the world and the way we live, work and spend our free time. The widespread use and increasing number of people with Internet access has paved the way for new and innovative ways of doing business. The importance of Internet is all the more clearly seen in this

period in which the COVID-19 pandemic has moved many of the daily activities online.

Nowadays, reading product reviews online, ordering food or buying a holiday without leaving home are all ordinary, unspectacular things. But online business development is far from showing signs of slowing down. From business to business or business to consumer models of electronic business to dropshipping and e-government, the landscape of e-business is constantly developing. For example, dropshipping has been the trend in recent years, being considered 'an innovation' that 'can provide superior competitiveness' (Abrudan/Matei/Abrudan 2018). Books, online guides and tutorials that explain how to run a dropshipping business have been published and many shared their dropshipping success stories online.

1. Literature review

In terms of scientific research, in March 2020, there were over 7000 published scientific papers which contain the term e-commerce or e-business in the topic, from all fields of study, in Web of Science Core Collection. Over 2000 of these were published in the field of Computer Science and Information Systems, while about 3500 of the published scientific papers were in the fields of Business, Management and Economics. With a total of 523 papers, 2008 is the year with the most research articles published, while there were only 4 published articles between 1982 and 1997 (according to Web of Science data).

In 2015, Yan, Lee and Lee, in an effort to identify the main concern regarding ecommerce related research published, analyze research papers published from 2000 to 2013 in academic journals included in Web of Science database. The authors have identified 68 terms as main keywords of ecommerce research that were subsequently grouped into three broad categories: technology, management and customer (Yan/Lee/Lee 2015). Moreover, in a research on data from 130 countries, Larosiliere, Carter and Meske (2017) found that the 'technological maturity, public readiness, and information and communication technology law sophistication' have a positive impact on the level of acceptance of social network by individuals in a country.

Several of the research papers published are investigating the correlation between business performance and online presence of a company. For example, Bi, Davison and Smyrniotis show that 'IT resources, strategic IT alignment, market orientation, and business partnerships do contribute significantly and indirectly to SME performance through the development of e-business capability and business process competence'(Bi/Davison/Smyrniotis 2017), while Grefen and Turetken argue that there is a 'shift towards networked business scenarios'(Grefen/Turetken 2017). It is considered that the value creation potential of e-businesses depends on four interdependent dimensions: efficiency, complementarities, lock-in, and novelty (Amit/Zott 2001).

Other papers examine the reasons behind sharing commercial content on social networking platforms (Vilnai-Yavetz/Levina 2018).It is common knowledge that online comments influence consumers' decisions to buy and their perception on a company. More and more companies use social networking platforms to conduct targeted marketing and enterprise reputation management for e-commerce and e-

business. The influential power of a small group of active users could have a major impact on a large number of consumers' decisions to buy and the public's perception (Xu/Guo/Li/Lau/Liao 2012), therefore companies make increasingly more use of different mining methods to identify the groups with the most influential power. While e-commerce is constantly developing, different types of information sources have improved the consumers' online shopping performance. Grip force and eye-tracking sensors are applied to consumers' online reviews search behaviour (Fu/Manogaran/Wu/Cao/Jiang/Yang 2020). Factors affecting customer satisfaction in online shopping are also analyzed. Findings suggest that: 'customer service, information quality, response time, transaction capability, delivery, merchandise attributes, security/privacy, convenient payment method, and price' are all ingredients with a major positive impact on customer satisfaction in online shopping (Alam/Al/Omar/Hussain 2020). Online stores try to capitalize on every existing holiday, and even invent new holidays and events around which to create entire online sales campaigns. Singles' Day is the best example of such a 'holiday'. Singles' Day is an online shopping event that was originated in China and has rapidly grown exceeding the online sales of the Black Friday event. The success of this 'holiday' was analyzed by both practitioners and researchers. In a paper published in 2019, Chen and Li conducted a research on Chinese consumers and found out that 'online shopping festival atmosphere and Confucian values affect purchase intention', emphasizing the role of online shopping festival atmosphere incentives and cultural values on the intention of making an online purchase (Chen/Li 2019).

2. Methodology

The purpose of this paper is to analyse the online shopping behaviour of Romanians. For this purpose, we underwent the following steps:

- Statistics analysis and trends understanding. Within this stage, we examined the statistics on internet access and online purchases, we analysed the evolution on a 12 years' timeframe and we tested possible correlations.
- Online purchase behaviour survey. Within this stage, we discussed the findings of the survey conducted on online shopping behaviour of Romanian consumers.

The two steps taken are meant to complement each other and, together, provide a more complete picture of the perception of online shopping in Romania.

Statistics analysis and trends understanding

In recent decades, technological development has experienced significant acceleration, and smart devices are now widely available. As is the case for Romania, where in 2008 under 30 percent of all households had internet access, while by 2020, over 70 percent of all households had an internet connection. According to The National Authority for Management and Regulation in Communications (ANCOM), by the end of June 2019 there were 5.1 millions of cable internet connections with a monthly average traffic of 27 GB and 19.6 millions of mobile internet connections, with an average of 3.38 GB /month (ANCOM 2019).

The increase in the share of households that have access to the Internet has, as expected, increased the volume of online shopping. A study by Kantar Millward Brown in 2019 shows that 38 percent of Romanians have made online purchases at least once in the previous 12 months, placing Romania ahead of other countries such as Greece, Portugal, Italy, Croatia or Bulgaria, but far below the UK, Denmark and Germany, countries with the highest level of online shopping in Europe. Still, in Romania, online purchases worth about 3.5 billion Euros were made in 2018 (Pavel 2019).

Figure 1 illustrates the situation of online purchases, by categories of goods in 2008, respectively 2020, while Figure 2 illustrates the evolution of online purchases, by categories of goods.

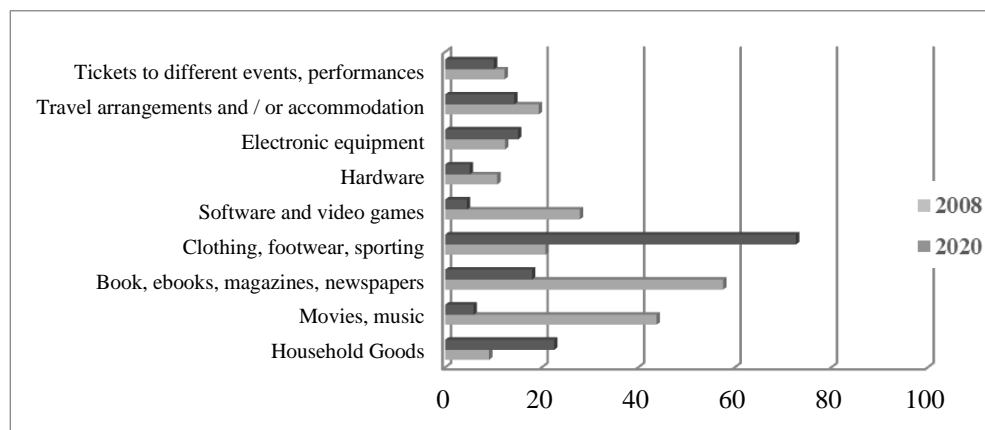


Figure1. Share of people who made online purchases: comparison 2008-2020 - based on data from theNational Institute for Statistics – Romania

Figures no 1 and 2 do not illustrate the evolution of online shopping in absolute number, but in percentage. According to figures 2 the most spectacular growth is registered in the Clothing, footwear, sporting category. Household goods and electronic equipment are the only other two categories that have recorded increases in the total share of sales for the time period considered.

For goods in the movies, music, software and video games category, for which the share of buyers has been declining, a possible explanation refers to the ease with which goods in this category can be pirated, as Romania is one of the countries with the most piracy site visits per internet user (Wong 2017).

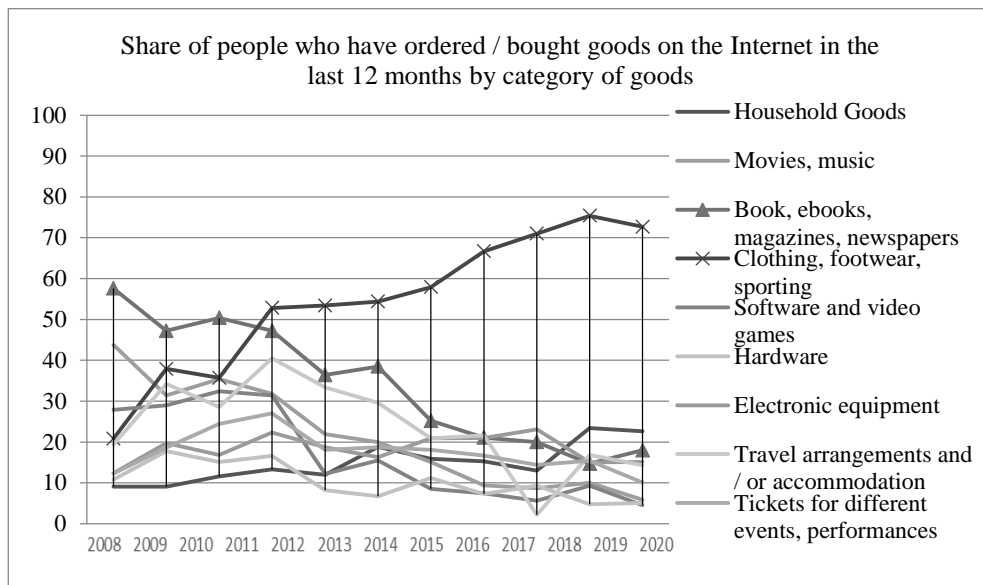


Figure2. Evolution of the share of people who made online purchases - based on data from the National Institute for Statistics – Romania

As mentioned above, the largest increase in the share of online shopping was registered in the Clothing, footwear, and sporting category. Thus, it seems that the more people have Internet access, the more purchases in the Clothing, footwear and sporting category. Not the same can be said about online shopping in other categories of goods. For example, for Books, eBooks, magazines, newspapers category the number of buyers remained almost constant in the last decade. But, when comparing their share to the increasing volume of online shopping and the increasing share of people with Internet access, this category seems to be declining. One could say that there are now new buyers for this category of goods.

To illustrate the connection between the share of online shopping in the clothing, footwear and sporting category and the share of homes with Internet access, we made use of the point cloud. The point cloud method is used to identify the shape of the regression function.

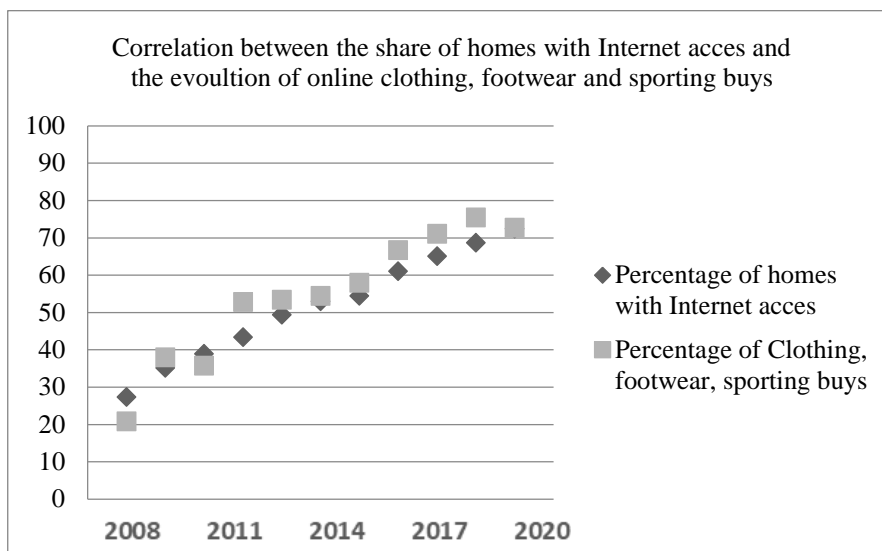


Figure 3. Point cloud to test the possible correlation between the share of homes with Internet access and the evolution of online clothing, footwear and sporting buys

Given the way in which the points are grouped, we can say that between the analyzed variables there is a strong, direct and positive correlation, the Figure indicating a simple linear function. Next, we calculated the correlation coefficient between the two variables. The correlation coefficient can be calculated in various ways, there are calculation formulas that can be used, such as the one below.

$$R_{Y/X}^2 = \sqrt{\frac{\sum_{i=1}^T (y_i^2 - \bar{Y})^2}{\sum_{i=1}^T (y_i - \bar{Y})^2}}$$

For calculating the correlation coefficient between the share of homes with Internet access and the evolution of online clothing, footwear and sporting buys, we used an Excel data analysis feature (see Table 1). The correlation coefficient obtained is 0.97, which proves the existence of a strong positive link between the two variables.

Table 1. Correlation Coefficient

	Percentage of homes with Internet access	Percentage of Clothing, footwear, sporting buys
Percentage of homes with Internet access	1	
Percentage of Clothing, footwear, sporting buys	0.972649187	1

For a better view on the analyzed variables (i.e. online purchases categories), we used excel to study the descriptive statistics of the main online purchases categories (see Table 2). Since the data are shown for each category in Table2, we will present here only some of the main aspects related to these descriptive statistics.

Table 2. Descriptive statistics of main online purchases categories

<i>Household Goods</i>		<i>Movies, music</i>		<i>Book, e-books, magazines, newspapers</i>	
<i>Mean</i>	14.91818	<i>Mean</i>	21.21818	<i>Mean</i>	34.20909
<i>Standard Error</i>	1.479116	<i>Standard Error</i>	3.841113	<i>Standard Error</i>	4.540994
<i>Median</i>	13.3	<i>Median</i>	20	<i>Median</i>	36.4
<i>Standard Deviation</i>	4.905674	<i>Standard Deviation</i>	12.73953	<i>Standard Deviation</i>	15.06077
<i>Sample Variance</i>	24.06564	<i>Sample Variance</i>	162.2956	<i>Sample Variance</i>	226.8269
<i>Kurtosis</i>	-0.56058	<i>Kurtosis</i>	-1.10317	<i>Kurtosis</i>	-1.61473
<i>Skewness</i>	0.679562	<i>Skewness</i>	0.458673	<i>Skewness</i>	0.142392
<i>Range</i>	14.3	<i>Range</i>	37.9	<i>Range</i>	42.9
<i>Minimum</i>	9.1	<i>Minimum</i>	5.9	<i>Minimum</i>	14.7
<i>Maximum</i>	23.4	<i>Maximum</i>	43.8	<i>Maximum</i>	57.6
<i>Clothing, footwear, sporting</i>		<i>Software and video games</i>		<i>Hardware</i>	
<i>Mean</i>	54.42727	<i>Mean</i>	19.16364	<i>Mean</i>	10.26364
<i>Standard Error</i>	5.195664	<i>Standard Error</i>	3.368228	<i>Standard Error</i>	1.364103
<i>Median</i>	54.4	<i>Median</i>	15.5	<i>Median</i>	9.3
<i>Standard Deviation</i>	17.23207	<i>Standard Deviation</i>	11.17115	<i>Standard Deviation</i>	4.524218
<i>Sample Variance</i>	296.9442	<i>Sample Variance</i>	124.7945	<i>Sample Variance</i>	20.46855
<i>Kurtosis</i>	-0.25878	<i>Kurtosis</i>	-2.16372	<i>Kurtosis</i>	-0.99621
<i>Skewness</i>	-0.65315	<i>Skewness</i>	0.088617	<i>Skewness</i>	0.547465
<i>Range</i>	54.6	<i>Range</i>	26.8	<i>Range</i>	13
<i>Minimum</i>	20.8	<i>Minimum</i>	5.6	<i>Minimum</i>	4.8
<i>Maximum</i>	75.4	<i>Maximum</i>	32.4	<i>Maximum</i>	17.8
<i>Electronic equipment</i>		<i>Travel arrangements and / or accommodation</i>		<i>Tickets to different events, performances</i>	
<i>Mean</i>	18.3	<i>Mean</i>	23.77273	<i>Mean</i>	17.61818
<i>Standard Error</i>	1.033089	<i>Standard Error</i>	3.267334	<i>Standard Error</i>	1.469497

Median	18.7	Median	21.6	Median	18.1
Standard Deviation	3.426368	Standard Deviation	10.83652	Standard Deviation	4.87377
Sample Variance	11.74	Sample Variance	117.4302	Sample Variance	23.75364
Kurtosis	-1.04637	Kurtosis	0.192034	Kurtosis	0.379663
Skewness	-0.21512	Skewness	-0.41583	Skewness	0.548711
Range	10.7	Range	38.3	Range	16.9
Minimum	12.4	Minimum	2.2	Minimum	10.1
Maximum	23.1	Maximum	40.5	Maximum	27

The largest Mean (which is defined as the average of a data set) is recorded, as expected, for the Clothing, footwear, and sporting category, while the lowest mean is recorded for the Hardware category. Standard deviation (which measures the dispersion of a dataset relative to its mean) is highest for Books, e-books, magazines and newspapers category and for the Clothing, footwear, and sporting category, and lowest for the Electronic equipment category. Regarding dataset symmetry, Software and video games category (with a Skewness of 0.08) seems to be the most symmetric dataset, while Household goods and Clothing, footwear, sporting categories with Skewness of 0.67 and -0.65 are moderately skewed. The largest Range (i.e. the difference between maximum and minimum value) are recorded for: Clothing, footwear, sporting (54.6), Book, e-books, magazines, newspapers (42.9), and Travel arrangements and / or accommodation (38.3).

The attitude towards online shopping. Results and discussion

To analyze the attitude of individuals towards online shopping, we conducted a quantitative survey, based on an inquiry, using an online questionnaire. The questionnaire comprises 19 questions, 17 closed-ended questions, 2 open-ended questions. The population studied consists of individuals with Internet access. The questionnaire was distributed through a social network. The questionnaire was completed by 580 respondents, of whom 18 percent are from the rural area and 82 percent from the urban area. The distribution by age and gender of the respondents is shown in Figure 4.

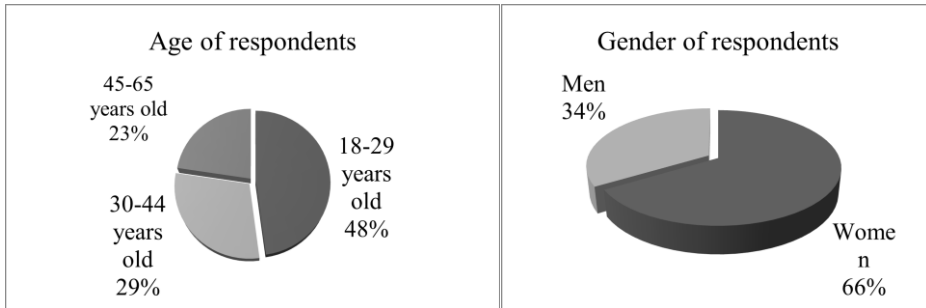


Figure 4. Distribution by age and gender of respondents

Out of the total of 580 respondents 79 percent admit to making online purchases at least once in their lifetime. The percentage is higher for the 18 to 29 age group, where 96 percent of respondents have made at least one online purchase in their lifetime, as opposed to only 44 percent of respondents in the 45 to 65 age group.

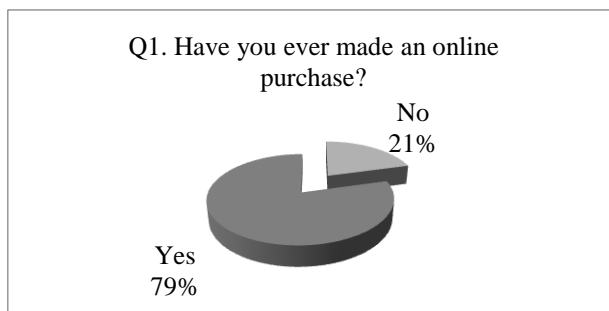


Figure 5. Share of respondents who made an online purchase

The main aspects associated with online shopping (see Figure 6) refer to:

- ease of online shopping;
- home delivery/shopping from home;
- convenience.

These could be considered incentives or benefits that drive people to buy from home and enjoying shopping without being necessary to go out. All online businesses should identify what are the consumers' motives to buy. Different target markets could mean different reasons to go online.

Issues related to online shopping security and other uncertainties rank four and five in the top of online shopping aspects listed by respondents (see Figure 6). Only 4 percent of respondents think of 'internet' when asked about online shopping. Internet has become such a trivial thing that most people do not realize that Internet access is a sine qua non for shopping online.

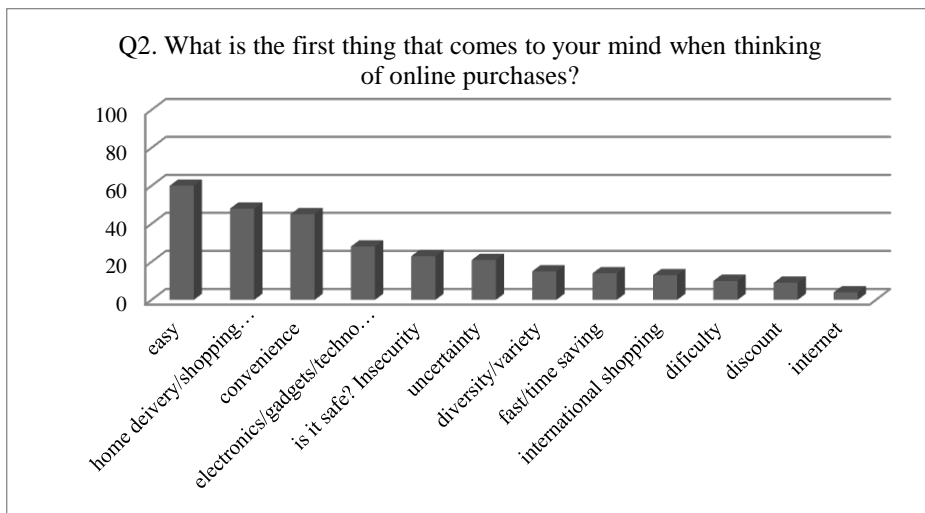


Figure 6. Aspects associated by respondents with online shopping

When asked if familiar with online business terms, most of the respondents answered that they are familiar with the terms 'e-commerce' and 'shopping cart', but less familiar with terms like SEO, drop shipping and pay-per-click, which are not in direct correlation with their status of online buyers (see Figure 7).

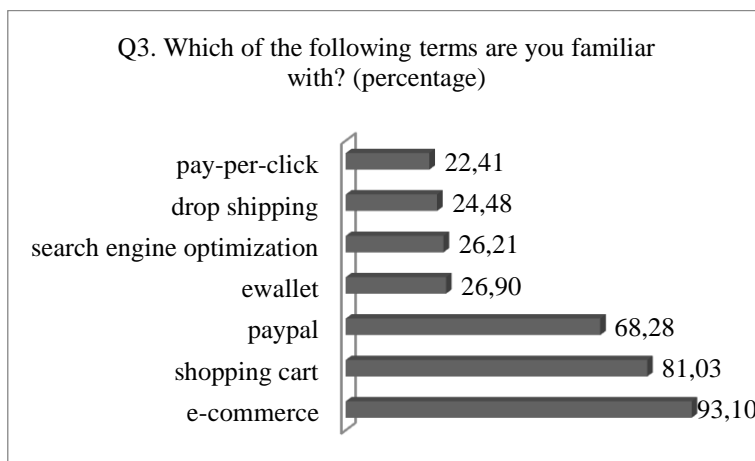


Figure 7. Specific ecommerce terms

Although, 71 percent of the respondents are comfortable in making online purchases, 28 percent still fear the online purchases procedure. Most of the respondents stating they don't feel comfortable making online purchases live in rural areas. This may be explained by the fact that Internet access has spread to a lesser extent and more slowly in rural areas (see Figure 8).

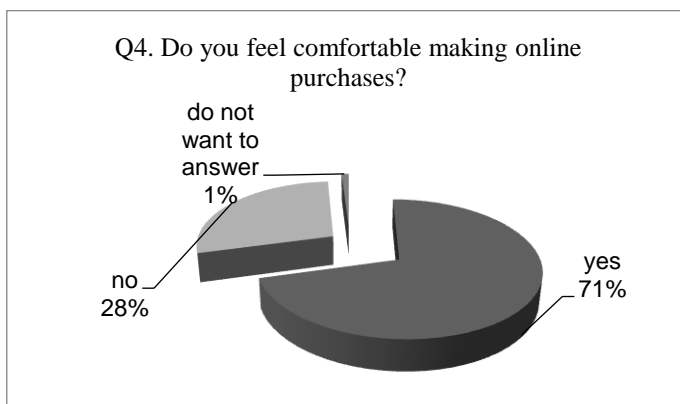
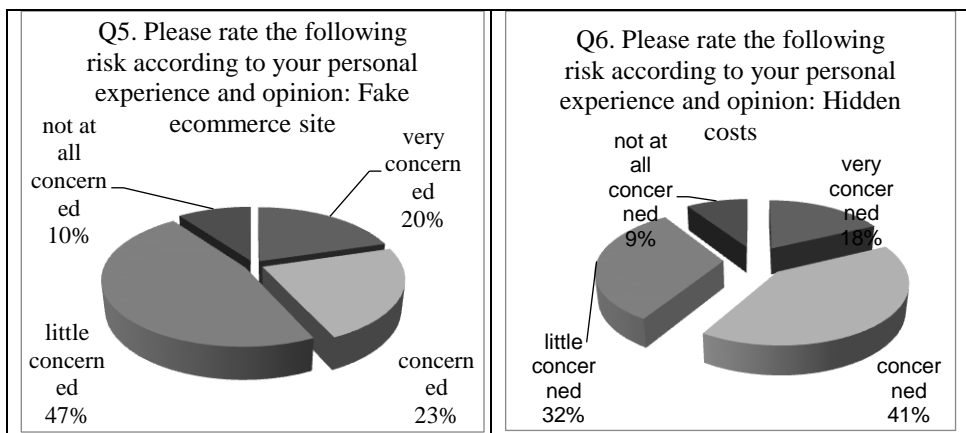


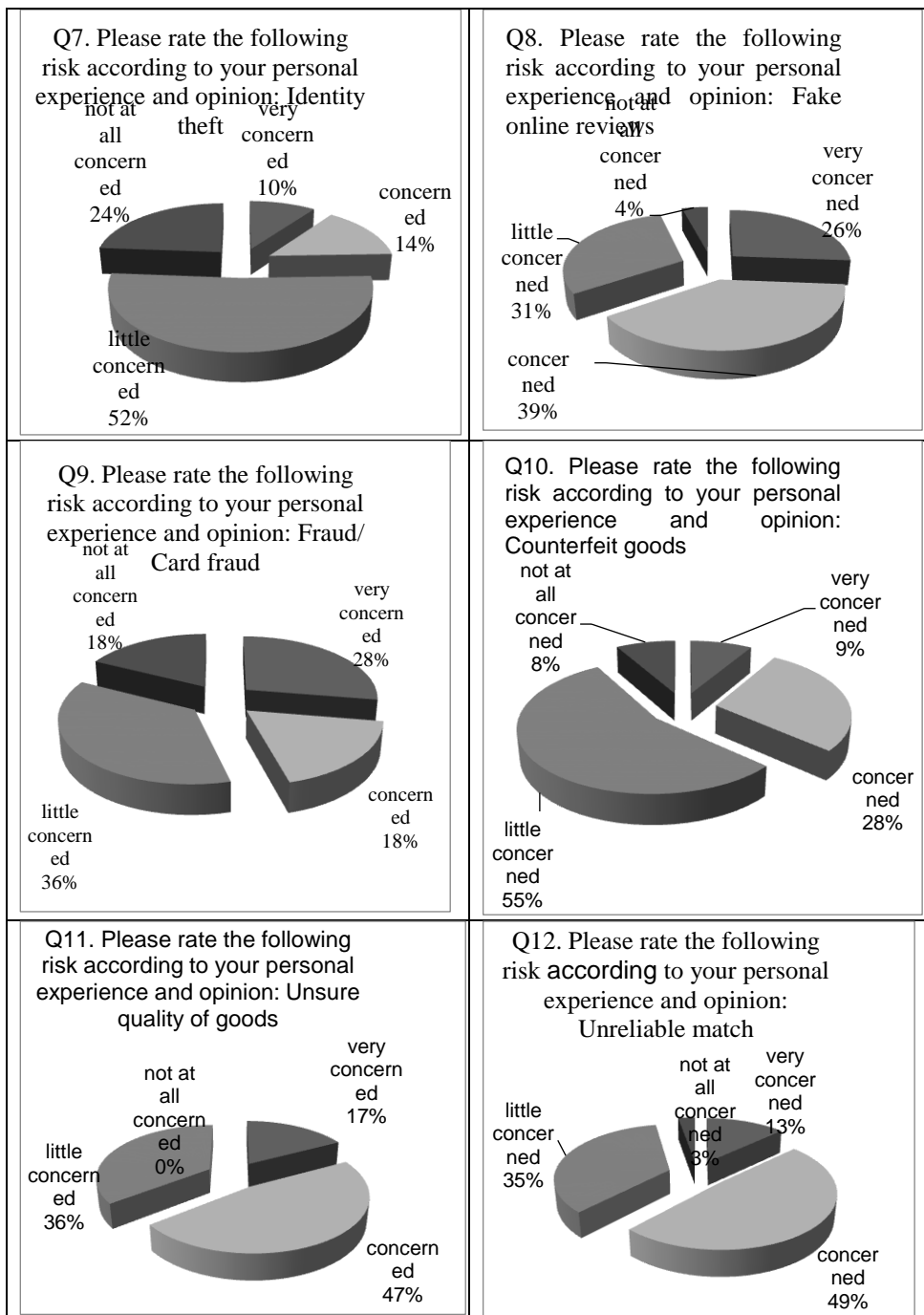
Figure 8. Illustration of the percentage of respondents who feel comfortable in making online purchases

Respondents were asked to rate 10 possible risks of online purchases according to their personal experience and beliefs. These are top three risks that worry potential online buyers:

- fake online reviews
- uncertain quality of goods
- unreliable match

The risk of fake online reviews is perceived by 65 percent of respondents. Trust is essential as online comments influence consumers' decisions to buy as well as the companies' public image. The same can be said about the second most feared risk associated with online shopping: uncertain quality of goods, a risk perceived by 64 percent of respondents.





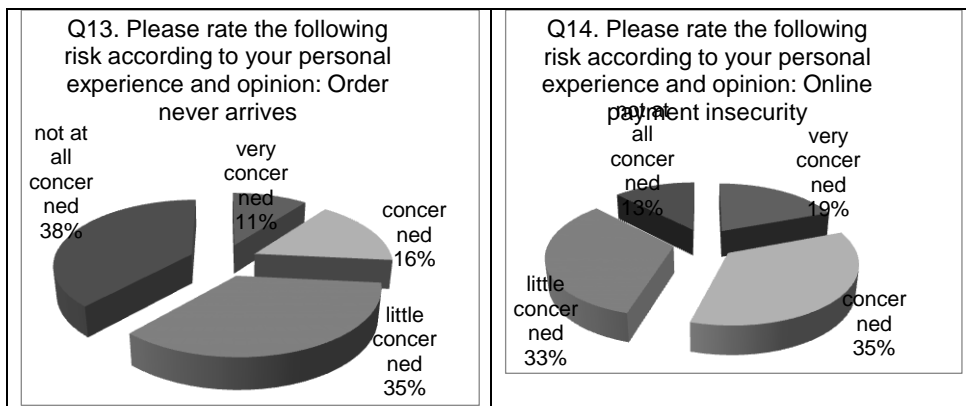


Figure 9. a -j. Respondents' views on risks associated with online purchases

On the other hand, identity theft, order never arriving, counterfeit goods are the lowest ranking risks associated with online shopping. Still, these are risks perceived by over 30 percent of respondents, which could mean that Romanian consumers are not very comfortable in making online purchases. Most likely the lack of confidence is a feature of the Romanian culture, having its origin in the high level of generalized corruption and in the aftermath of communism.

To fight the perceived risks, online sellers should think of a set of measures to reduce the risks perceived by buyers. Easy and cost free return policy could make the risks associated with online purchases seem more insignificant. Other associated risks should not be neglected. For example, 59 percent of respondents fear the possible hidden costs of their online purchase.

Of the 580 respondents, 64 percent would rather opt for online shopping. Related to the preference for online shopping, there is no significant difference between genders, but there are significant differences in relation to the age category of the respondents. 84 percent of the respondents in the 45 to 65 age group would rather shop in traditional brick and mortar stores, while only 14 percent of the respondents in the 18 to 29 age group would do the same. This is understandable if we take into account these two factors: a) the younger generation had access to technology and the internet from an early age and b) the older adults have a higher degree of distrust in technology and financial institutions.

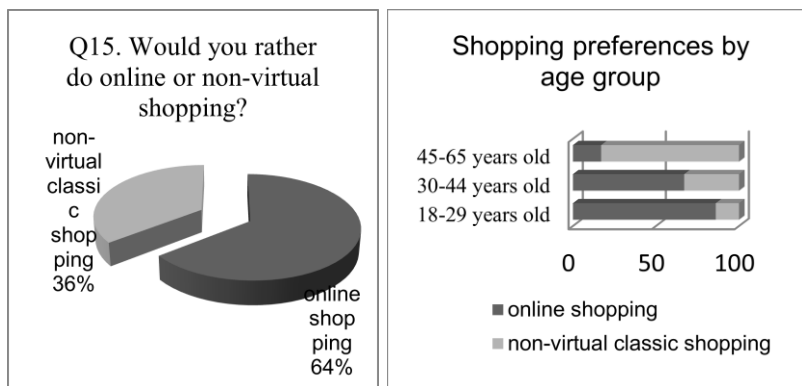


Figure 10. Expressed preferences for online shopping vs. classic shopping

58 percent of women respondents offered home delivery as one of the top reason to choose online shopping, while among men only 35 percent think home delivery is one of the benefits of online shopping. There is also a significant difference between women and men responses regarding the benefit of time saving: while 73 percent of women think time saving is an important advantage of online shopping, only 55 percent of men agree. Easier price comparison seems to be more important for men respondents if we consider the fact that 72 percent of men and only 16 percent of women listed this feature as one of the main reason why they choose online shopping over traditional, brick and mortar shopping stores (Figure 11).

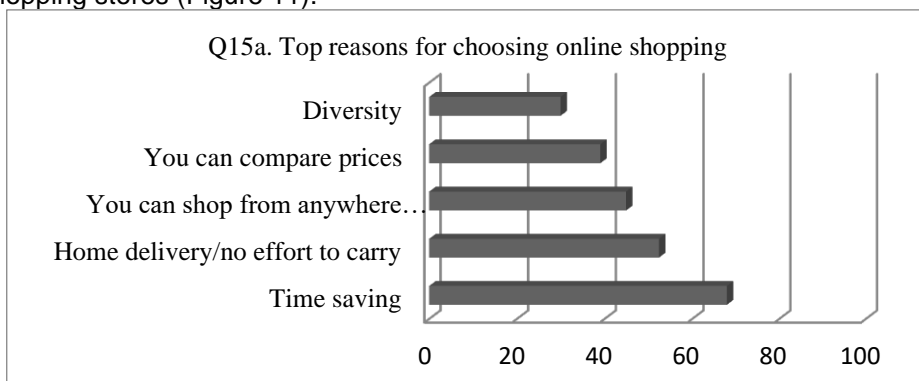


Figure 11. Top reasons for choosing online shopping

The main reason offered for choosing brick and mortar stores refers to the possibility to touch and try on the products and be in control. This has been expressed, in one form or another, unanimously by the respondents who prefer classic shopping. It is worth mentioning again that 84 percent of the respondents in the 45 to 65 age group show a preference towards traditional brick and mortar stores.

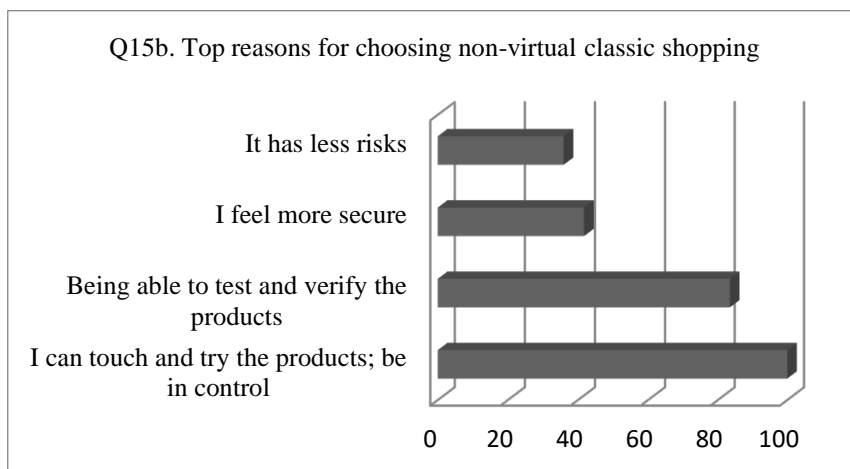


Figure 12. Top reasons for choosing classic shopping

Of course, there are certain goods for which classic purchase is more comfortable for Romanian buyers, especially when it comes to testing and verifying, or even trying on the product one desires to buy. But, more easily to follow return policies could shift the buyers' perception and could tip the balance in favour of online shopping.

Research limitations

- Due to the fact that the questionnaire was distributed on a social network, the unregistered population was excluded
- Although the respondents come from all areas of Romania, approximately 60 percent live in the western part of Romania.

Taking into account the two limitations expressed above, the research results cannot be extrapolated to the entire Romanian population.

3. Concluding remarks

The purpose of this paper was to analyse the online shopping behaviour of Romanians. The analysis was done in two stages: 1. Statistics analysis and trends understanding and 2. Online purchase behaviour survey. The two stages complemented each other in order to provide an overview on the perception of online shopping in Romania.

Although 64 percent of the 580 participants in our survey prefer online shopping (especially the young adults in our survey), many of them associate certain risks with online purchases, which could mean that Romanian consumers are not very comfortable in making online purchases. Most likely the lack of confidence regarding online shopping is part of a generalized distrust which characterizes the Romanian culture, having its origin in the high level of widespread corruption and in the aftermath of communism.

Romania online shopping market is not yet mature. Online business can grow and will grow in the coming period, but there is still a long way to go before Romanian e-commerce market will reach its full potential. Nonetheless, Romania is ahead of countries like Greece, Italy, Croatia or Bulgaria, but far behind China

and the United States, which are the largest e-commerce markets in the world. Of the two, China is the biggest and most dynamic e-commerce market in the world, with twice as many money spent online than the US, which are the second largest global market (Kantar 2020).

In China, mobile phone purchases have been driven by large socialization ecosystems, which have their own integrated e-commerce and digital payment platforms, making shopping easier. The records of this country regarding online shopping during various commercial events, such as Singles Day, make us realize that Romania is very far from the online presence of China or the United States. Applications that offer video ads connected to online stores that allow consumers to discuss and shop at the same time and complete their purchase without leaving the app may seem futuristic to customers in Romania, where there are still individuals under the age of 45 who use bank cards only to withdraw their salary on pay-day. Online giants such as Amazon, Google, Pinterest and Facebook bring content and commerce in one place using shoppable ads. Amazon introduced Amazon Live in 2019, as did other platforms like Taobao and Alibaba (Kantar 2020). Beyond mobile, a generation of shoppable TVs is about to enter the market, considering LG plans to use Augmented Reality (AR) TVs which 'allows viewers to immediately purchase products seen on their favorite TV programs' (Careless 2020). It looks like we will see many e-commerce and social media platforms, online and mobile video channels, and even TV, that will compete to keep up with the ever changing e-commerce landscape in the near future (Kantar 2020).

Given the large number of mobile Internet users, online stores need to adapt and optimize their mobile access pages to reach all potential customers. With the confluence of information technology era and the progressively aging society, the share of older adults that use the internet is growing at a substantial rate (Soh et al. 2020), becoming a significant potential target market for e-commerce. 5G technologies, ultra-fast smart devices, lack of borders in online commerce are already present, so the future belongs to those who will know how to adapt and anticipate the needs of online shoppers. What lies ahead? Only time will tell.

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THE NOTORIETY OF BIBLIOMETRIC ANALYSIS IN THE FIELD OF MARKETING

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Abstract: *Bibliometric research has recently gained much interest from academics seeking to investigate a particular topic. This study aims to explore the interest of marketing specialists in investigating marketing-related topics using bibliometric analysis. The paper includes the following sections: general information about bibliometric analysis, research methodology and how the database of articles was designed, data analysis results, conclusions and other insights. In this study, we considered the Scopus database for selecting the set of scientific papers. The applications used in the data analysis process are VOSviewer and QDA Miner. To achieve the purpose of the research, we analysed the productivity and impact of countries, journals and papers on the topic of bibliometric analysis in marketing. We also tried to identify the marketing-related concepts that generated the most interest from the specialists in their bibliometric analysis. The study aims to highlight the favorite topics related to marketing that specialists are interested in exploring through bibliometric research.*

Keywords: *bibliometric analysis; literature review; marketing; VOSviewer; Scopus database.*

JEL Classification: *M30; M31*

1. Introduction

The academic world pays more and more attention to bibliometric analysis, realizing the benefits that complex and complete bibliometric analysis can bring to the understanding of a field of study. Donthu et al. (2021) emphasize the rigour of this research method for exploring large volumes of scientific data. The extent of the bibliometric analysis is due, on the one hand, to the availability in scientific databases such as Scopus, Web of Science, Google Scholar, PubMed, etc. of the data needed to carry out the analysis, but also to the appearance of a significant number of software applications (Moral-Munoz et al., 2020; Xie et al., 2018) specially designed for easily carrying out bibliometric analysis and generating indicators of interest for specialists, among these applications are frequently

mentioned Bibexcel, CitNetExplorer, Biblioshiny, CiteSpace, VOSviewer, Gephi, etc.

In the context of investigating scientific literature, bibliometric analysis is approached alongside other methods that aim at the same goal, such as meta-analysis and systematic literature review, with the mention that bibliometric analysis and meta-analysis are quantitative techniques, and the systematic review of the literature is mainly a qualitative one (Donthu et al., 2021). The acceptance of bibliometric analysis as an evaluation method and decision-making technique together with other research methods will be an advantage for both specialists and scientific research, and this comes as a result of numerous research on the applicability of bibliometric analysis, as well as the usefulness proven by bibliometric tools (Gauthier, 1998). Other researchers consider that bibliometrics can only serve as a component or tool in a broader framework of research viewed as a unitary whole in terms of data quality, reliability of methods and indicators, and the validity of findings and conclusions (Waltman and Noyons, 2018).

The specialized literature mentions two major categories specific to bibliometric analysis: performance analysis and science mapping, aiming at the contributions of components involved in research and the relationships between them, where the research components could be authors, countries, institutions, journals, topics (Donthu et al., 2021). As specific performance analysis objectives, the following are indicated: productivity in the researched field - reflected by the number of publications, respectively impact on the field - reflected by the number of citations.

Bibliometric analysis based on mixed bibliometric techniques that combine co-citation analysis and bibliographic coupling analysis can bring advantages and benefits in the field of knowledge regarding marketing literature (Maucuer et al., 2022). Among the advantages and benefits brought by bibliometric analysis that complete the suite of achievements in the field, the following are included: finding new themes of marketing research, helping researchers achieve a deeper understanding of a targeted field of interest, identifying trends in the targeted marketing field, providing an overview of the analysed marketing field, contribute to the flow of new knowledge and the research orientation of both researchers and practitioners to current issues and findings (Sánchez-Camacho et al., 2021).

Research in the field of marketing and its related subjects has experienced a significant increase in recent decades (Nicolas et al., 2020). The academic world pays more and more attention to bibliometric analysis for marketing topics - from general topics such as consumer behaviour and digital marketing, to very specific topics such as the approach to obesity in marketing research (Onjewu et al., 2022).

2. Research methodology

The study aims to explore the interest of specialists in investigating marketing-related topics using bibliometric analysis. Achieving the objectives of this study required formulating the following questions:

Q1. Which is the evolution in time of the interest for bibliometric analysis in the investigation of marketing-related topics?

Q2. Which countries have the highest scientific productivity and impact for the field under investigation?

Q3. Which are the journals with the most scientific productivity and impact on marketing-related topics bibliometric analysis?

Q4. What are the most relevant marketing concepts addressed in bibliometric analysis articles?

The search process

To carry out this study, we chose the Scopus database to select the papers that will be included in the study. The selection of papers was made in May 2022, so for the year 2022, only the first 5 months of the year were considered.

The selection algorithm presented below was used to select the papers from the database, for words in the title, abstract or keywords sections. In the "Subject area" category, the fields that we did not consider relevant to the current research were excluded. In the Document Type category, we chose only papers from the "Article", "Review" and "Conference Paper" categories. Also, we kept in the selection only the papers written in English. In the first stage, after the selection, there were 1084 papers in the database (dataset). Later, we analysed the papers evaluating the title, keywords and, in some cases, the abstract, and kept 447 papers in the database. The selection algorithm used is the following:

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TITLE-ABS-KEY ( ( bibliometric AND marketing ) OR ( bibliometric AND ( customer OR customers ) ) OR ( bibliometric AND ( promotion OR advertising OR branding OR "sales force" ) ) OR ( bibliometric AND ( pricing OR placement ) ) OR ( bibliometric AND ( segmentation OR targeting OR positioning OR differentiation ) ) ) AND ( LIMIT-TO ( SRCTYPE , "j" ) OR LIMIT-TO ( SRCTYPE , "p" ) ) AND ( EXCLUDE ( SUBJAREA , "ENER" ) OR EXCLUDE ( SUBJAREA , "PSYC" ) OR EXCLUDE ( SUBJAREA , "BIOC" ) OR EXCLUDE ( SUBJAREA , "NURS" ) OR EXCLUDE ( SUBJAREA , "EART" ) OR EXCLUDE ( SUBJAREA , "CENG" ) OR EXCLUDE ( SUBJAREA , "MATE" ) OR EXCLUDE ( SUBJAREA , "PHYS" ) OR EXCLUDE ( SUBJAREA , "DENT" ) OR EXCLUDE ( SUBJAREA , "IMMU" ) OR EXCLUDE ( SUBJAREA , "CHEM" ) ) OR EXCLUDE ( SUBJAREA , "VETE" ) ) AND ( LIMIT-TO ( DOCTYPE , "ar" ) OR LIMIT-TO ( DOCTYPE , "re" ) OR LIMIT-TO ( DOCTYPE , "cp" ) ) AND ( LIMIT-TO ( LANGUAGE , "English" ) )
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3. Data analysis

In order to achieve the purpose of the research and find the answers to the proposed questions, a series of analyses were carried out for the database with the selected papers. The software applications used in data analysis are VOSViewer and WordStat/Provalis. The results will be presented next.

Annual Productivity: the evolution in time of the interest for bibliometric analysis in the investigation of marketing-related topics.

A first step to understanding how the interest in the bibliometric analysis of marketing concepts has evolved is the analysis of the quantitative evolution of the number of papers written on this topic over time. This evolution is presented in Figure 1.

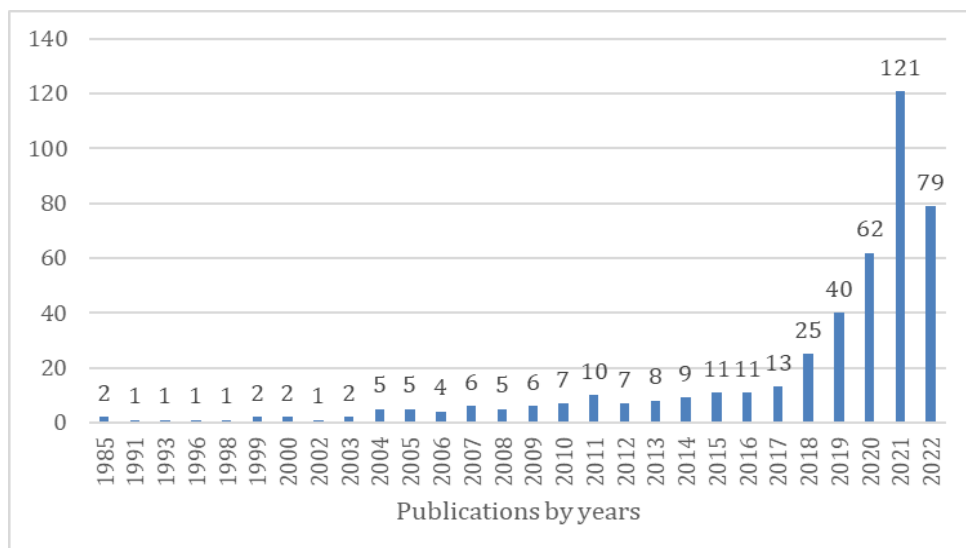


Figure 1: The evolution in time of the interest for bibliometric analysis in the investigation of marketing-related topics.
Source: own representation

It is easy to see in Figure 1 that a significant increase in the interest in the bibliometric analysis of marketing concepts is marked by the year 2018. A significant increase in the number of papers is seen from one year to another, for example, in 2021 the number of papers is almost double than that of 2020. Following the observed trend, it can be estimated that the number of papers in 2022 will be significantly higher than in 2021, the 79 papers represented in the graph for 2022 are only those from the first 5 months of the year, the selection of the papers for the study taking place in May 2022.

Country Productivity and Impact

According to the results of the study, the countries with the highest productivity, evaluated in terms of the number of published papers are the United States of America (87 documents), India (69 documents), Spain (55 documents), the United Kingdom (47 documents) and China (39 documents). Details are presented in Figure 2. From the point of view of impact, measured by the number of citations, the countries with the highest impact of published papers are the United States of America (2474 citations), the United Kingdom (1145 citations), Spain (997 citations), Australia (677 citations) and India (546 citations) (additional details in Figure 3).

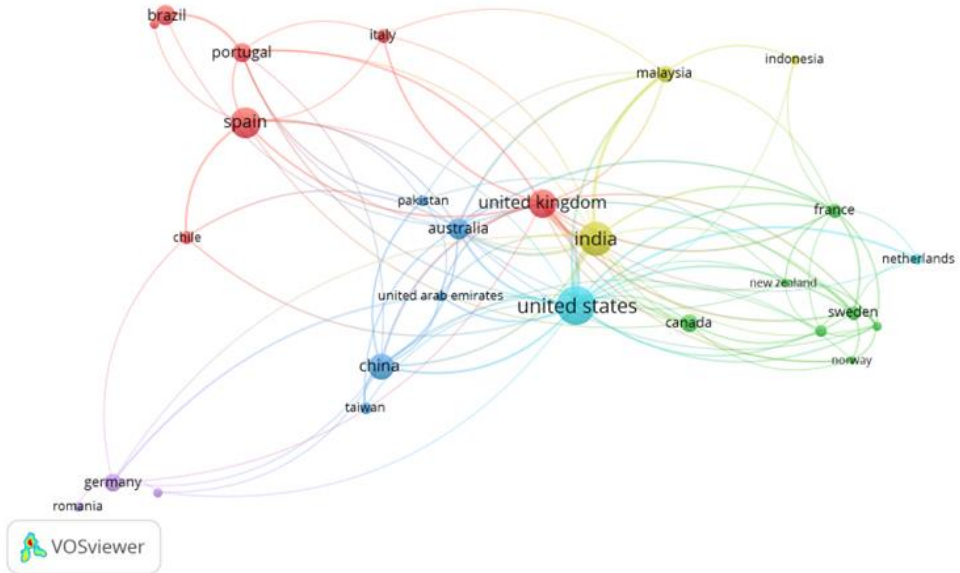


Figure 2: Productivity by country: number of publications.
Source: own representation

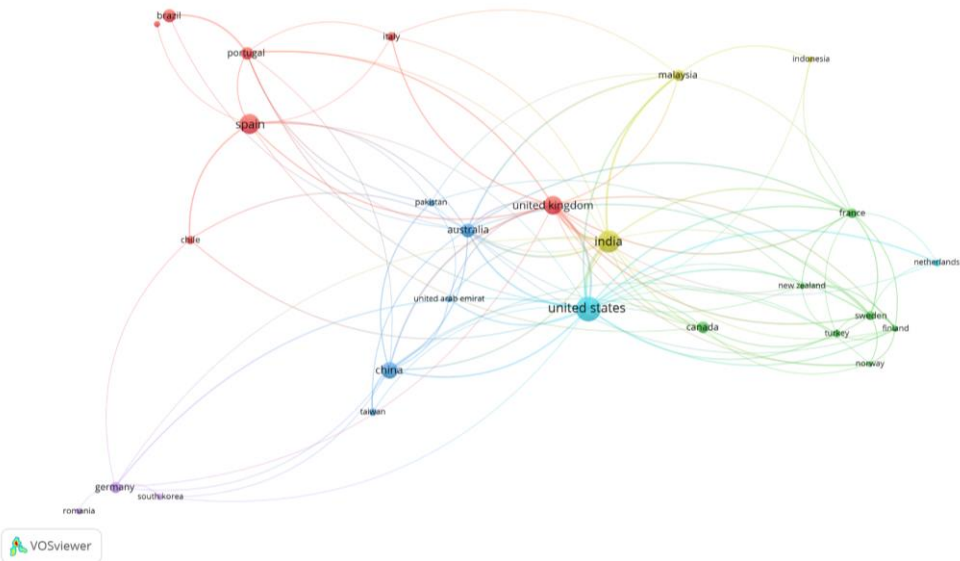


Figure 3: Impact by country: number of citations.
Source: own representation

Journal Productivity and Impact: Number of publications by journal
According to the study, the hierarchy of journals that contain papers presenting bibliometric analysis of marketing topics is:



Figure 4: Productivity by journal: number of papers published.

Source: own representation

From the perspective of the impact measured according to the total number of citations that the papers published in a certain journal have, it is found that the top of the journals with the greatest impact, according to our study, is presented in Table 1. Taking into account the fact that the number of years since publication differs from one article to another, we also calculated an average of citations/year, thus achieving a ranking of journals based on the average number of citations/year. This graph is presented in Figure 5.

Table 1: Impact by journal: Top 10 journals with the most cited articles.

Journal name	Total number of citations
Journal of Business Research	580
European Journal of Marketing	524
Journal of the Academy of Marketing Science	391
Managing Service Quality	383
Industrial Marketing Management	315
Journal of Advertising	284
Scientometrics	263
Journal of Business and Industrial Marketing	157
International Journal of Hospitality Management	141
Journal of International Business Studies	105

Source: own representation

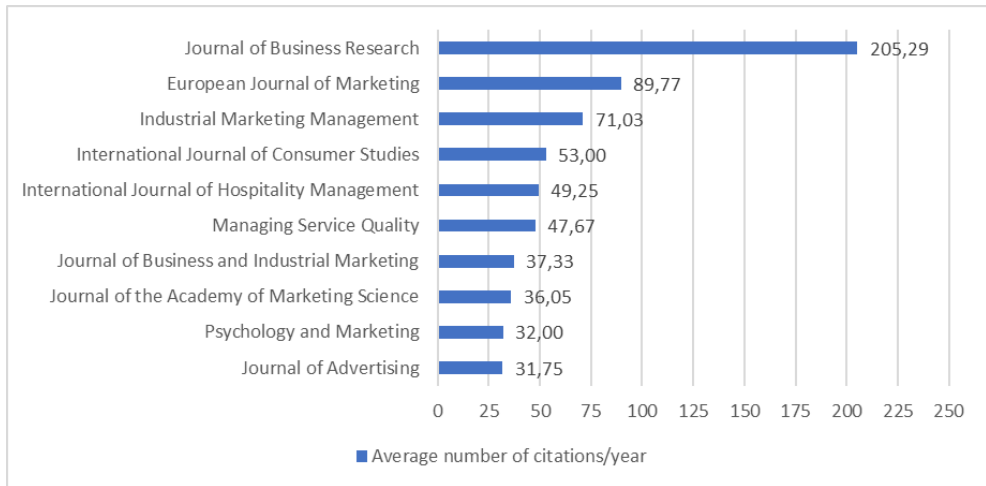


Figure 5: Journal impact based on the average number of citations/year.
Source: own representation

Most significant articles based on the number of citations

In this section of the study, we aimed to highlight the papers with the greatest impact (based on the number of citations), which aim at the bibliometric analysis of concepts in the field of marketing. To achieve this objective, we considered two indicators: the total number of citations obtained by an article and the average number of citations/year obtained by the article (we considered that the papers were published at different times, implicitly the average number of citations/year can be a relevant indicator in measuring the impact).

An overview of the most cited papers was obtained using the VOSviewer application (Figure 6).

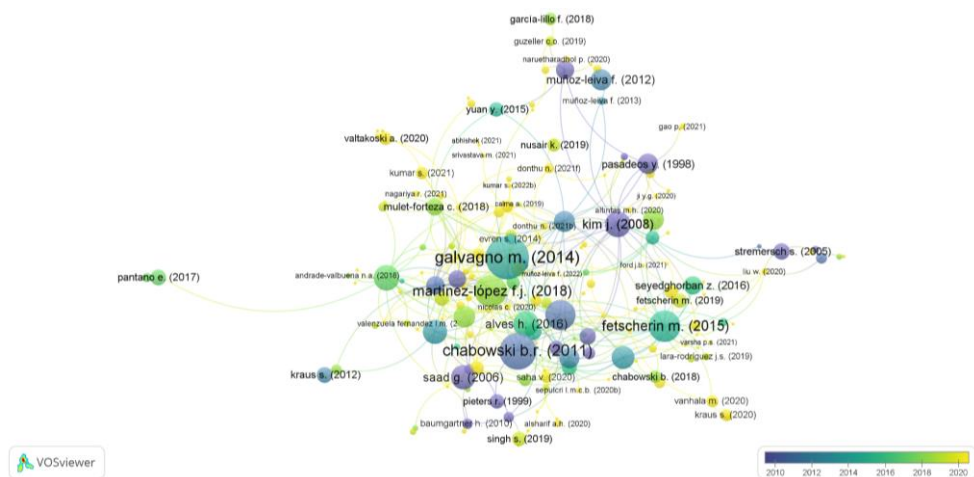


Figure 6: Most cited papers - identified by the first author and the year of publication.

Source: own representation

According to our study, based on the total number of citations obtained, the hierarchy of papers that present bibliometric analysis of concepts in the field of marketing is as follows (Table 2):

Table 2: Top 5 most cited papers: total number of citations.

Title	Authors, Year of publication	Journal	Total number of citations
Theory of value co-creation: A systematic literature review	(Galvagno & Dalli, 2014)	Managing Service Quality	378
The structure of sustainability research in marketing, 1958-2008: A basis for future research opportunities	(Chabowski et al., 2011)	Journal of the Academy of Marketing Science	277
Fifty years of the European Journal of Marketing: a bibliometric analysis	(Martínez-López et al., 2018)	European Journal of Marketing	208
Consumer brand relationships research: A bibliometric citation meta-analysis	(Fetscherin & Heinrich, 2015)	Journal of Business Research	198
Research into environmental marketing/management: A bibliographic analysis	(Leonidou & Leonidou, 2011)	European Journal of Marketing	183

Source: own representation

Taking into account the fact that the papers were published in different years, we considered it relevant to analyse the impact of the papers also based on the average number of citations/year obtained by each article. In terms of the average number of citations/year, the papers with the greatest impact are presented in Table 3.

Table 3: Top 5 most cited papers: based on average number of citations/year.

Title	Authors, Year of publication	Journal	Average number of citations/year
Fifty years of the European Journal of Marketing: a bibliometric analysis	(Martínez-López et al., 2018)	European Journal of Marketing	52
Theory of value co-creation: A systematic literature review	(Galvagno & Dalli, 2014)	Managing Service Quality	47.25

Consumer brand relationships research: A bibliometric citation meta-analysis	(Fetscherin & Heinrich, 2015)	Journal of Business Research	28.28
Thirty years of the Journal of Business & Industrial Marketing: a bibliometric analysis	(Valenzuela et al., 2017)	Journal of Business and Industrial Marketing	26
The structure of sustainability research in marketing, 1958-2008: A basis for future research opportunities	(Chabowski et al., 2011)	Journal of the Academy of Marketing Science	25.18

Source: own representation

Keyword co-occurrence analysis

An important objective of the study is the analysis of the keywords mentioned by the authors, in such a way as to be able to determine which are the most approached marketing concepts investigated using the bibliometric analysis. For a better analysis of the keywords, we created and used a file (VOSviewer thesaurus file) that allows for a unified vision of identical concepts but presented/written differently in the keywords section of the papers. A first analysis in the database using the VOSviewer application led to the identification of 984 keywords, of which only 194 have more than two occurrences. It is noted, first of all, that the most used scientific databases in bibliometric analysis for marketing-related concepts are Scopus (20 occurrences) and Web of Science (17 occurrences), and the most used software applications are VOSviewer (38 occurrences), CiteSpace (8 occurrences), Biblioshiny (6 occurrences), respectively Gephi (5 occurrences).

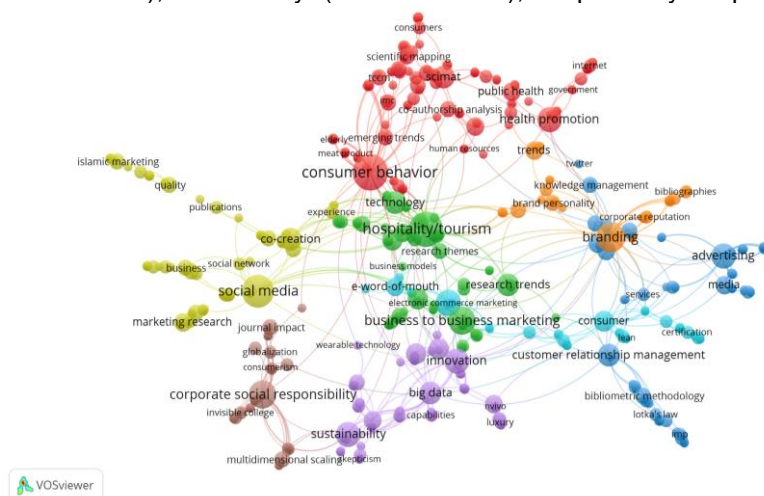


Figure 7: Author keywords co-occurrence.

Source: own representation

This analysis is carried out based on the keywords indicated by the authors. In order to identify the topics of interest in the field of marketing that the authors address in the papers included in the database considered in this study, in the keyword analysis we excluded generic keywords related to bibliometrics and literature review or other methodological aspects related to bibliometric analysis. Consequently, according to our study, the marketing concepts most addressed in bibliometric analysis are presented in Figure 7.

It can be seen in Figure 7 that 8 clusters centered around some key concepts were identified:

Cluster 1 - core concept “consumer behavior”

Cluster 2 - core concepts “hospitality/tourism” and “business to business marketing”

Cluster 3 - core concepts “customer relationship management” and “advertising”

Cluster 4 - core concept “social media”

Cluster 5 - core concepts “sustainability” and “innovation”

Cluster 6 - core concept “digital marketing”

Cluster 7 - core concept “branding”

Cluster 8 - core concept “corporate social responsibility”

The analysis of the keywords indicated by the authors was completed with the analysis of the titles of the papers selected in the database. The WordStat application (Provalis Research) was used for this analysis. The result of the analysis using the WordStat application is presented in Figure 8.



Figure 8: Analysis of paper titles using WordStat/Provalis.
Source: own representation

4. Conclusions

The results of the research highlight the growing interest that the academic world gives to bibliometric analysis for the study of specialized literature specific to marketing concepts. Of the total of 447 papers selected in the database, over 70% were published in the period 2018-2022. This fact highlights the growing interest of specialists in conducting bibliometric analysis in the field of marketing concepts.

According to the results of the study, the journals with the most papers published on the subject of bibliometric analysis

for marketing-related concepts are: Journal of Business Research, Industrial Marketing Management and Journal of Business and Industrial Marketing. From the point of view of the number of citations, the journals with the greatest impact, according to the current research, are the Journal of Business Research, the European Journal of Marketing, the Journal of the Academy of Marketing Science and Industrial Marketing Management. An important objective of the research was to highlight the favorite topics related to marketing that specialists are interested in exploring through bibliometric research. The analysis of the keywords indicated by the authors, together with the analysis of the titles of the papers included in the dataset led to the conclusion that the most addressed marketing topics investigated by means of the bibliometric analysis are from the following categories: consumer behavior, hospitality/tourism, social media, branding, corporate social responsibility, business to business marketing, digital marketing, customer relationship management and sustainability. We consider that the investigation of marketing concepts through bibliometric analysis will continue in the next period, probably moving from the investigation of general concepts to more specific ones.

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THE ROLE OF ARTIFICIAL INTELLIGENCE IN CONTENT CREATION AND CHECKING ITS EFFECTIVENESS IN THE GOOGLE ADS ADVERTISING SYSTEM

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Abstract: *In Hungary, 94% of businesses have Internet access and 63% have a website. Moreover, online retail sales will reach HUF 1,203 billion in 2021. In order for companies to achieve the largest possible market share, they can use various digital marketing strategies. They are distinguished according to different methods. One of the most commonly used in practice and in science is inbound (as search engine optimization) and outbound (as advertising). Google Ads, which emerged at the turn of the millennium and defined itself as the world's first company to use machine learning technology, is a market leader. Their ad system was initially based on keywords, which have since been expanded to include more than 4,800 types of targeting criteria. These targeting options are available for a variety of ad formats. The digital solutions to the billboards of traditional marketing are banner ads, called Display on Google. These ads contain image, video, and text content and aim to interrupt the consumer's activity and redirect them to the advertiser's website. Since they are capable of increasing website traffic by up to 300%, this can be interpreted as an opportunity that is also considered favorable by businesses. It is also suitable for testing various content elements, as one of its main indicators, the click-through rate, expresses the relevance of the ad, as several researchers have noted. As the role of artificial intelligence grows, more and more companies are using it as a competitive advantage. Some of their algorithms are capable of generating text, images, videos, or other content. In this study, I leverage the power of display ads and conduct my research in the Google Ads system instead of conducting consumer surveys. I created two ads for the same target audience, with the same budget and settings. The text content for one ad was created by a marketer, the image content was created by a professional photographer, and the content elements for the other ad were provided by Artificial Intelligence. The objective of the article is to study the performance, efficiency, and impact of artificial intelligence-generated content on conversions under real market conditions. The study also includes content created by the players.*

Keywords: *Digital Marketing; Artificial Intelligence; Advertising; Google Ads; PPC*

JEL Classification: *M31; M34*

1. Introduction

The new fields that digital marketing has created have also stimulated theorists and researchers. A search for the keyword digital marketing on sciencedirect.com also shows that in 2000 there were only 519 publications, while by 2020 this number had quadrupled. According to Hungarian Central Statistic Office (KSH, 2020) data, internet traffic in Hungary is growing dynamically, by 2020 download traffic

increased by 18% and upload traffic by 29% compared to 2019, and the percentage of businesses using the internet reached 94%. Their comprehensive research also included websites and found that 63% of Hungarian businesses have a website (Hungarian Central Statistic Office, 2020). The growing number of businesses appearing online reflects changing consumer behavior. In 2021, there were 68 million transactions worth 1,203 billion forints (GKID, 2022). In order for the company to increase its market share and make an effective sale in the online space, it needs to work with a combination of different strategic marketing activities, which Bleoju et al. (2016) presented in their research.

Search engine optimization for inbound marketing is given special attention because it is not only the digital marketing channel that offers the best ROI (Shirey, 2022), but its optimal design allows the owner to direct potential customers to the website in an organic way by displaying the website in a better place than other websites. among the results of a search page (Egri and Bayrak, 2014). Without doubting the importance of search engine optimization, I question its principle because if every company considers it as the most important tool, no meaningful change in search results can be achieved. Therefore, it becomes necessary for companies to optimize other channels, such as click-based online advertising, which can be considered partly as an outbound and partly as an inbound strategy. In his paper, Kulova (2021) points out that these advertising platforms are effective for both customer acquisition and retention. In this transformation, Google plays a role as an active contributor (Mehta et al., 2007).

The closed advertising system was originally called Google Adwords, referring to the fact that ads are displayed based on keywords and search terms that consumers type into the search engine (Za and Tricahyadinata, 2017). Advertising opportunities have continued to expand, leading to enrichment of segmentation opportunities. Instead of or in addition to keywords, 4,809 types of factors can be selected to reach the target audience. This list can be viewed by anyone at Vidhoarder.com (2022). In addition to each segmentation category, they also address in their list which of Google's advertising systems can be used: Display, Video In-Stream, Video Discovery, Gmail, Search, Shopping. One of the 10 most important factors defined by Alcouffe (2013) concerns the content elements of ads. According to him, more effective communication can be achieved by creating attractive ads.

Among the listed Google Ads advertising options, display ads are the ones where both image and text presentation play a particularly important role. So, in this study, the question was in what form artificial intelligence can provide the content elements of the ad. In the first phase of the study, a literature review is conducted that seeks an answer to the question of the optimal design of the Google Ads ad and the possible applications of artificial intelligence, in addition to the communication options. Then, instead of a consumer survey, ads created in the system under active conditions are presented, one by Artificial Intelligence and the other by a marketer. The results section of the study examines the conversion differences between the ads placed with a small budget and looks for the answer to the question: can artificial intelligence communicate and achieve business goals more effectively than a marketer?

2. Literature review

It is interesting that the appearance of television almost 100 years ago caused at least as much doubt (Stephens, 2022) as the possibilities of the Internet, since many assumed that with its appearance the strategy that companies could use would be limited (Porter, 2001). However, the opposite was true, and not only tactical solutions but also strategic trends developed. A study by Ascend 2 (2019), which looked at marketing strategies, showed that the main goal for companies was still revenue (64%), but alongside this, many other conversion goals were mentioned that had nothing to do with revenue (e.g., increasing website traffic by 25%). Respondents considered content marketing to be the best tactic (58%), followed by search engine optimization (50%) and ads on search engines and social media in 4th place with 34%.

2.1. Digital marketing channels

In reviewing the work of practitioners and theoretical researchers, I have concluded that typically between 5-12 digital marketing channels are identified (Siddiqui, 2020, Lane, 2022). And the differences arise from inconsistent blending and separation of categories. Lindley's (2022) practical article divides channels into a total of 7 parts: social media marketing, search engine optimization, email marketing, video marketing, affiliate marketing, influencer marketing, and click-based advertising. Among these channels, which have emerged in the course of the development of information and communication technologies and whose aim is to influence the communication of the company's offer and the decision-making of customers (Aswani et al., 2018), in this paper I focus on PPC-based advertising. The importance of this topic is confirmed by the results of Josifovska's (2022) study on PPC statistics, according to which spending on search engine advertising will exceed \$191 billion by 2024. Almost half of the companies plan to invest in this marketing channel. Hill (2019) found for various PPC platforms that display ads can increase website traffic by 300% and Google can reach 5.6 billion people. McCandless (1998) defined banner advertising in his pre-millennial article. It is the most common form of advertising on the Internet and can be placed on the side, top or even bottom of the website depending on its position. Murphy, Peltekian, and Gardner (2018) also mention a specific advertising system in their definition of display advertising: "Paid advertisements that appeared on the side of the user's internet browser while browsing the internet on various websites determined by Google Ads for their relevance and suitability" (Murphy, Peltekian and Gardner, 2018:4). The purpose of this ad is to direct consumers to a specific website thanks to its clickable form. Ahmed and Kwon (2014) emphasise that despite the existence of various online advertising channels, companies usually opt for display ads, which are studied by many researchers from different perspectives.

2.2. Digital marketing measurement

Costing for online ads can be done in several ways. Mangani (2004) was the first to examine the framework for display-based pay-per-view and search-based pay-per-click pricing methods. In terms of cost, the equivalent of click-based advertising is CPC (cost-per-click), while in the case of pay-per-view it is CPM (cost-per-

impression) (Ahmed and Kwon, 2012). Fjell (2010) has already studied the relationship between this cost and click-through rate. In my opinion, he is right because the performance indicators and metrics of these click-based ads are derived from the clicks. Consumer (user) acceptance and perspective is expressed by click-through rate (Yang and Zhai, 2022). For this reason, both researchers and practitioners are concerned with it in general (Robinson et al., 2007) or in the context of its prediction (Richardson et al., 2007). Dean (2022) used 4 million search results as the basis for his study CTR, to determine click-through rates for organic results. On average, the first non-advertised result has a click-through rate of 27.6%, while the tenth result on the same page has only a tenth of that. Valve and Metre's (2018) study looked specifically at ad click-through rates, which averaged 2% across all industries. Within these ads, Lincoln (2021) focused specifically on display ads and found that the click-through rate in this case was only 0.46%. However, there are other ways to measure performance, but this area is theoretically underdeveloped (Järvinen and Karjaluto, 2015). They reflected on the structure of the metrics as follows, "Marketers need a comprehensive but manageable set of performance metrics, which requires that they understand the relationships among the metrics and are able to focus on the critical metrics" (Järvinen and Karjaluto, 2015:120). Accordingly, in their research, they established several metrics that serve as the basis for measuring efficiency. Brown (1996) made eight different suggestions for effective performance measurement:

It makes more sense to use fewer indicators,

It is necessary to link the measured data to success factors,

Indicators must focus on the past, present, and future,

The development of indicators must be based on stakeholder expectations,

There is a need to assess performance at the whole process level,

Indicators can be combined for a more comprehensive assessment,

There is a need to ensure flexibility of indicators,

Indicators need to be linked to business objectives.

In his article, Bonini (2018) examines the metrics found and applicable in the Google Ads system, which not only meet Brown's (1996) definitions but also serve as the basis for important conclusions from the perspective of this study. These include impression, which reflects the total number of impressions achieved in each time period, and clicks, which allow conclusions to be drawn about the relevance of the ad when the click-through rate is calculated from the previous two data. In addition, the bounce rate, the time spent on the page and the number of engaged users can also be studied, but these data are not presented in this study. In contrast to the conversion rate, which represents the achievement of the goal set by the company, the request for a quote for the service. In Hungary, Gál (2015, 2016) has published several books about the Google Ads system, which help companies to optimize their ads and had a great influence on my research direction. Science does not deal specifically with the creation of ads for several reasons. One of the most important is that it is a very rapidly changing field, so publications become outdated too quickly. Therefore, I will not address ad setting in this study. Google Ads has published informational material (Google.com, 2022) for successfully setting ads.

2.3. Artificial Intelligence in marketing

According to Google.com (2022), display ads can reach 90% of Internet users through websites, videos, and apps. And the message is delivered based on the definition of different criteria. Gale's (2022) thoughts on Google Ads display ads: "When you think of Google Ads targeting, you probably think of keywords. What you probably do not immediately think of is audiences: Ads for people based on who they are, not what they are looking for." (Gales, S.J., www.wordstream.com). Artificial intelligence is already playing an active role in this process. There are several machine learning techniques, such as supervised machine learning, which can be used in the separation of pre-labelled data (spam mail filtering), or unsupervised learning, which can be used in clustering and segmentation (Adoni, 2018). In the article by Data-flair (2019), it can be read that Google calls itself the first company to use machine learning techniques. This is complemented by the article by Google Developers (2022), which states that the applications of supervised machine learning techniques are more diverse than unsupervised machine learning. Even after extensive research, no information can be found that clearly indicates which method is used to collect consumer data and effectively implement segmentation and targeting in the Google Ads system.

In any case, AI has a significant impact on daily life and is estimated to be worth over \$136 billion by 2022. This value is expected to increase 13-fold in the next 8 years (Howarth, 2021). Key statistics from Jovanovic (2022) include data on companies: 37% of companies use artificial intelligence. Moreover, nine out of ten leading companies are investing in this capability. On his website, Marr (2021) gives several examples of how companies are using artificial intelligence and for what activities. Some for self-driving cars (Alphabet), others for digital assistants (Amazon, Apple, Google). However, from the perspective of this study, the method used by the Alibaba company is important because it automatically creates product descriptions - that is, it is used to generate content. The technology was characterized on Alibabatech.com (2018), and its benefits were defined in three points. Discovers consumer preferences, generates selling points, and personalizes the process. In my research, I am looking for an answer to the question of how the content created by the automata behaves in the Google Ads system.

3. Research method

The literature review confirmed that among the applicable channels of digital marketing, click-based ads, which include display ads, are an effective solution to reach consumers. Instead of surveying consumers, the study evaluates the role of artificial intelligence in content creation, its performance, and its impact on conversions through this advertising channel.

3.1. Content elements of the research

To conduct the study, an appropriate website (simplified.com) and a marketing expert created an appropriate amount of content that included the keywords wedding photo and wedding video, and the name of the base company in Hungarian. In both cases, the created texts contained 5 headlines with a maximum length of 30 characters each. Also, 1 long title line with 90 characters and 4

descriptions with a maximum length of 90 characters each. Table No. 1 contains sample texts (translated from Hungarian into English).

Table 1: Texts, created by marketing expert and AI

	Marketing expert	Artificial Intelligence
Title example	Wedding photos and videos for the price of '22	Professional photo and video
Title example	Your wedding is an eternal memory	A beautiful, lasting memory
Title example	Trust us with your wedding photography	Several years of experience with weddings
Title example	Trust us with your wedding video	We preserve your memories for a lifetime
Long Title	For love, there is only one remedy: marriage. And we will capture your big days.	Our experienced team captures your wedding in stunning detail, from start to finish.
Description example	Fulfil your dream, and we will make it a lifelong memory!	Request a quote today or contact us for a free consultation: We will answer all your questions
Description example	Remember with our wedding photos and relive your big day with our video!	We offer a wide range of photography and videography services to capture your big day
Description example	Request a quote for wedding photography and video at 2022 prices today!	Our goal is to give you an everlasting memory with stunning images and videos!

Source: Own editing

Besides headlines and descriptions, the most important element of display ads is the visual design.



Figure 1 Pictures, created by a Photographer and AI
Source: Own editing

The left side of the image collection at Figure No. 1 was created by a professional photographer, while the right side was created using a special artificial intelligence page.

The image generation function of artificial intelligence already provides several setting options. The length and verbosity of the specified expression affects the level of detail in the final image. Many websites offer settings that affect the style of the final image. The first image on the right is marked as natural and the second image on the right is marked as futuristic. The third image on the right, which is different from the usual illustration where you see an AI-generated flower instead of humans, turned out not to be the type of image normally shown in advertising when consulting with the photographer and marketer. Although the images do not show this, the AI-generated faces are still indistinguishable, they are abstract, and this was also shown in the advertising system during the test.

3.2 Conducting the research

Since the purpose of the research is to evaluate the role of artificial intelligence in content creation, its effectiveness, and its impact on achieving business goals, two ads were created in the Google Ads system. These ads are display ads created by a marketing specialist. The base business sells video and photography services for weddings, and the specific ads were created in this context, with the goal of requesting a quote for the service. The ads followed the following system:

The content elements of the ads reached an excellent level, based on the Google Ads system (they contained the right amount and quality of text and images). For excerpts, see “3.1 Content Elements of the Research”

The ads were shown only to women aged 25-44 living in Hungary (consistent geographic and demographic targeting was used)

The ads included only “life events, getting married soon” as an additional option to narrow down the target audience.

The ads ran for 10 days within a period (affected time: 09/09/2022-19/09/2022)

The ads ran on a consistent - low - budget.

The additional settings of the displays have been adjusted as far as possible so that only differences in content provide information.

4. Results

If we assume that the precision settings made in the Google Ads system were able to display the ads at the same time, under the same conditions, and to the same audience, then there is no variable other than the difference in the text and image content of the ad. So, the results for the two ads show the performance of the content. Table No. 2 contains the main indicators that were also listed in “2. The literature review”. Marketing expert in the left column, Artificial Intelligence in the right column.

Table 2 Texts, created by marketing expert and AI

	Marketing expert	Artificial Intelligence
Clicks	103	95
Impressions	112000	113000
Click Trough Rate	0.09%	0.08%
Average CPC	49.43 HUF	53.61 HUF
Total costs	5090 HUF	5090 HUF
Number of conversions	2	1
Estimated conversion value*	798000 HUF	399000 HUF
Estimated ROI*	15597%	7739%

Source: Own editing

*A peculiarity of the wedding photography and videography market is that the time between sending and accepting an offer that meets the needs of consumers is relatively long. The value of the submitted price offers is listed in the "Estimated conversion value" line. These offers have not yet been accepted, but when they are accepted, the values in the line "Estimated ROI" are converted to real values.

4.1. Examination of the results

The ad written by the marketing expert received more clicks, a total of 103, and the Artificial Intelligence achieved 95 clicks. The impression rate was also almost the same between the two ads. As a result, the CTR also differed only slightly, with a value of 0.09% for the marketing expert, and 0.08% for the AI. The cost per clicks also reflected these data, in the case of AI, a click cost almost HUF 4 more. The number of conversions was 2 in the case of the marketing expert, while 1 in the case of the AI. The value of the offer issued by the company for 1 conversion was HUF 399,000 on average, which also assumed the same value in these cases. The estimated value was highlighted accordingly, which becomes a real value after consumer acceptance, like the ROI value.

5. Conclusions

The ads created had a much lower click-through rate than average (Lincoln, 2021): only 0.08 and 0.09% compared to 0.42%. However, the cost per click is much lower than the market average (Bobchenok, 2022): 49-54 HUF instead of the average 274 HUF. On average, the conversion rate is between 2-5% (Kim, 2022). The marketer's ad achieved a rate of 1.94%, while AI's ad achieved only 0.94%.

In my opinion, the prepared text content meets the general requirements as it appeals to both emotions and realistic motives. It is not possible to draw general conclusions from the low budget, but in such a specialized market, the small differences are likely due to differences in image content.

The study has several limitations, which are listed below:

The segmentation of ads was based on local, demographic, and life event criteria; further fine-tuning of these criteria could yield better results,

The amount spent on the ads was at the author's expense, so the results represent a small number due to budget constraints,

Survey results may be different at different times, for different age groups, and in different locations.

Despite these limitations, however, we can conclude that AI's role as a content creator exceeds my expectations and is little different in effectiveness from content created by a marketer. The fact that the amount spent on advertising significantly exceeds the expected revenue means that it also has a positive impact on achieving business goals.

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RESEARCH ON THE PERCEPTION OF ROMANIAN PRE- UNIVERSITY TEACHERS ABOUT THE RELATIONSHIP BETWEEN E-LEADERSHIP AND MOTIVATION

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Abstract:

E-leadership research has evolved significantly in recent times, influencing the development of the education system, which has been affected by the effects of the pandemic. In order to keep up with the changes, teachers have had to adapt to the ever-changing requirements and opportunities. The topic of the paper refers to the perspective of Romanian pre-university teachers regarding the connection between e-leadership and motivation. The reason I chose to do this research is because e-leadership is a current topic. On the other hand, I am a teacher in the pre-university education system and I started my teaching activity in the middle of the pandemic and I can say that it was a real challenge for me to integrate remotely into a new team. Therefore, I found it opportune to study this subject, the paper being based on the identification of the main advantages and barriers of e-leadership in motivating employees. For this, I will look for the answer to the research question "What is the perception of pre-university teachers regarding e-leadership?", by sending a questionnaire among teachers. To answer this question, I carried out a quantitative research of a structured survey type, based on a questionnaire with 16 items, addressed to pre-university teachers, regarding the link between e-leadership and employee motivation. This survey was conducted online, in 1st-4th November 2022, through Google Forms, and I processed and interpreted the obtained data, using Microsoft Excel and SPSS statistical software. I hope this paper will be useful to all those interested in this topic, especially PhD students and leaders who want to deepen this topic.

Keywords: e-leadership; motivation; high-school education

JEL classification: I23; M10; M54

1. Introduction

E-leadership is a relatively new interdisciplinary research subfield that grew out of earlier studies of leadership and related concepts in technology management and administration. It is based and developed through research in business, educational technology, leadership and information sciences (Jameson et al., 2022).

Motivation refers to the way in which people manage to achieve their goals, the leader being the one responsible for maintaining a high level of employee motivation, which brings long-term benefits for the organizational and personal environment (Săseanu and Toma, 2019).

This work is based on the identification of the main advantages and barriers of e-leadership in motivating employees. The topic of the paper refers to the perspective of Romanian pre-university teachers regarding the connection between e-leadership and motivation. The reason I chose to do this research is because e-leadership is a current topic.

On the other hand, I am a teacher in the pre-university education system and I started my teaching activity in the middle of the pandemic, and I can say that it was a real challenge for me to integrate remotely into a new team. Therefore, I found it opportune to study this topic in more detail, the work being based on the identification of the main advantages and barriers of e-leadership in motivating employees.

2. Literature review

As Roman (2019) claims, e-leadership involves the development of skills to improve organizational functioning in the online work environment.

After reviewing the specialized literature, I found that one of the most current and accepted definitions of e-leadership by researchers is the one stated by Avolio (2014) who presents it as a process of social influence supported by ICT (information and communication technology), which can produce a change in the attitudes, feelings, thinking, behavior and performance of those led.

As Pitanken and Kazi (2021) explain, digitization has influenced the work environment by creating the possibility for organizations to work remotely and was able to assert itself when, in the first part of 2020, the World Health Organization declared that we are dealing with a global pandemic (WHO, 2021).

I agree with the statement that the pandemic period has been a challenge for humanity, with all areas affected to some extent by the effects of the restrictions imposed due to the coronavirus. It seems that one of the most affected areas was the field of education, consisting of millions of active students and teachers who previously had classes in their institutions and due to the pandemic, remained isolated at home (Selvaraj et al., 2021).

In order to obtain a mechanism suitable to the pandemic context, online teaching has become a viable way, with certain limits (Mishra, Gupta and Shree, 2020). The best of my knowledge, the employee motivation affects the competitive advantage and the organisational success. As Gitlab (2020) said, almost one third of the employees that work remotely sees motivation as a challenge in the online environment. To maintain a high level of performance we need effective leadership, so leaders need to attempt gaining as well as adapting new skills to lead and motivate their employees virtually.

3. Research methodology

For this paper, I have analyzed the impact of e-leadership on the motivation degree of teaching staff, which is based on the following research question: What is the

perception of pre-university teachers regarding e-leadership? To answer this question, I carried out a quantitative research of a structured survey type, based on a questionnaire with 16 items, addressed to pre-university teachers, regarding the link between e-leadership and employee motivation.

This survey was conducted online, in 1st-4th November 2022, through Google Forms, and I processed and interpreted the obtained data, using Microsoft Excel and SPSS statistical software. The first 7 questions have the role of outlining the profile of the Romanian teacher, by obtaining the identification data of the respondents, and the following are carried out according to the proposed objectives: determining the main advantages and barriers of e-leadership in motivating teachers in the pre-university education system, establishing the degree of e-leadership motivation of teachers and identifying the most used types of e-leadership motivation for teachers.

4. Findings

After applying the questionnaire, I obtained 184 valid answers from pre-university teachers. After analyzing the identification questions, I found that the majority of respondents are women (89.6%), from the urban environment (60.7%), aged between 40-49 years (41%), with an educational experience of over 20 years (51.9%), with 1st teaching degree (54.1%), who teach about subjects from Language and communication (24.6%) and Technology (19%) curricular areas in high school education (53%).

As can be noticed in Figure 1, regarding the question related to the degree of motivation during the online period, it seems that most of the respondents gave the grade 5 out of 6, in a proportion of 29.9%. The mean score was 4.4 with a standard deviation of 1.3, reflecting a high degree of motivation. It seems that the teachers were quite motivated in this period full of challenges.

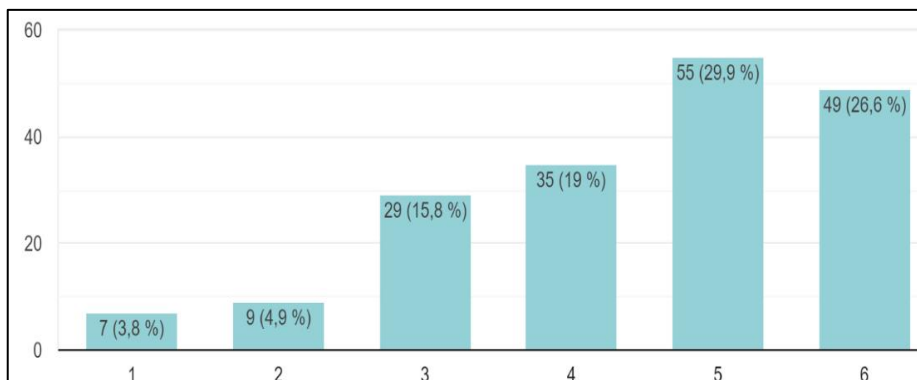


Figure 1: Degree of motivation during the online period

Source: Own processing from Google Forms

In Figure 2, I tried to represent the most used means of communication with management staff during online, video calls (Zoom, Google Meet) ranked first, with a percentage of 38%, and personal email came last, with only 2.7%. These results

show that probably a video call is one of the simplest and most intuitive, not needing special training before using it. Also, email is quite difficult to follow and does not offer the advantage of transmitting information in real time, as is the case with online video sessions, when we can receive and send feedback on the spot.

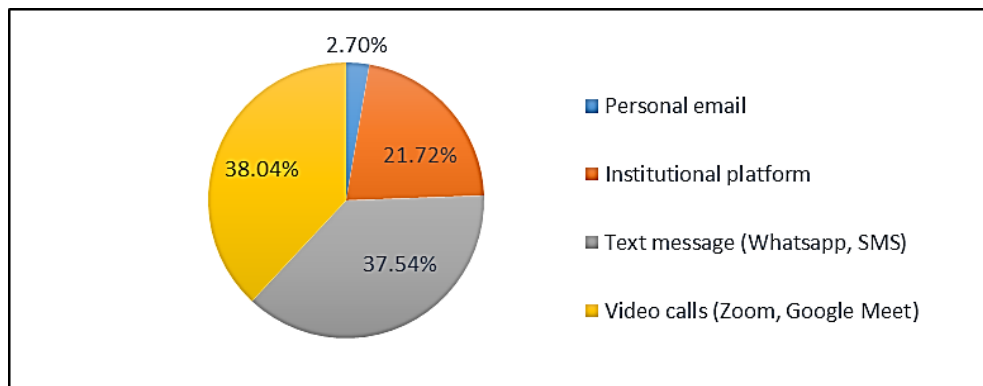


Figure 2: The most used means of communication with management staff during online

Source: Own processing in Excel

The most preferred means of communication are shown in Figure 3 and is represented by text messages, in a proportion of 55.4%, followed by video calls, with only 10.9%. This highlights the fact that not everyone is comfortable with the option of online meetings. The method preferred by teachers is convenient, but comes with the disadvantage of the intervention of misunderstandings that are difficult to clarify through text messages.

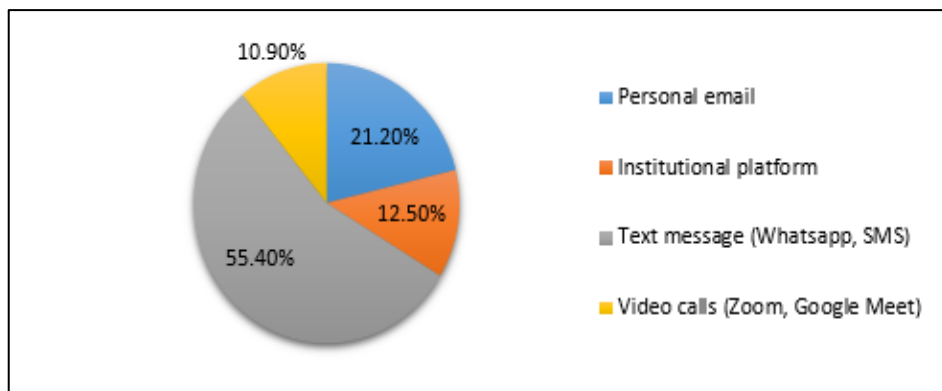


Figure 3: The most preferred means of communication with management staff during online

Source: Own processing in Excel

Taking into account the results from Figure 4 about the teachers' assessment of the level of management staff's skills during online classes, I found that written communication skills (Mean = 3.92; StD = 1.493), IT skills (Mean = 3.79; StD =

1.534) and the way of explaining regarding work tasks (Mean = 3.80; StD = 1.478) did not convince the teachers and were appreciated at an average level. E-leadership requires these skills, and their lack can be a barrier to motivating employees.

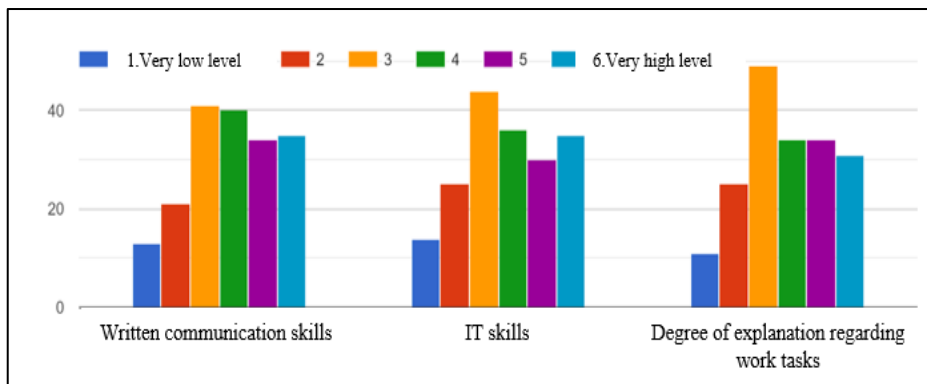


Figure 4: The teachers' assessment of the level of management staff's skills during online classes

Source: Own processing from Google Forms

I can say the same about their attitudes highlighted in the Figure 5, the trust in the activity carried out by teachers (Mean = 3.83; StD = 1.552), the granting of new responsibilities (Mean = 3.89; StD = 1.498) and the active involvement in the improvement of teachers through courses (Mean = 3.57; StD = 1.662) also obtained average values, as expected. Ideally, these skills and attitudes should be improved in order to turn them from barriers to advantages.

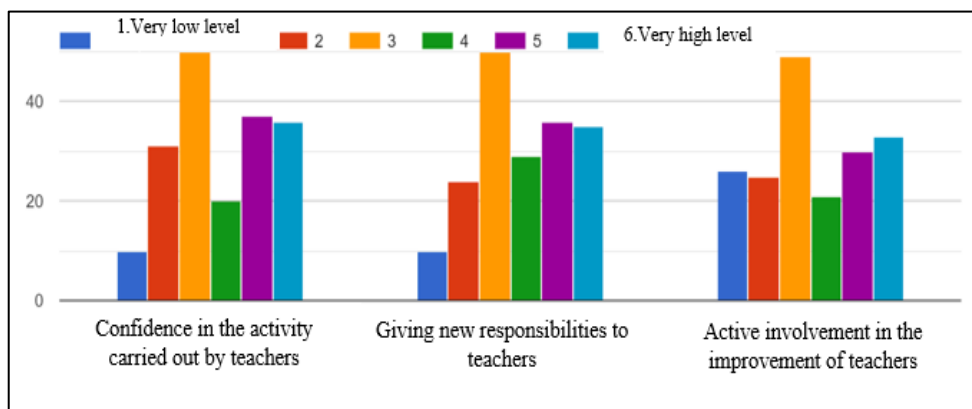


Figure 5: The teachers' assessment of the level of management staff's attitudes during online classes

Source: Own processing from Google Forms

I pointed out in Figure 6 that the management was involved in providing the necessary support for conducting online classes by providing electronic devices

(58.2%), providing access to the Internet (35.9%), ICT courses (19.6%), educational platform (69%) and the at least one guide for using the online platform (39.1%).

I believe that all these actions together could support the online activity, and the directors who implemented them, certainly had adequate results, their lack representing weak points with a major impact on the level of education in the respective institution.

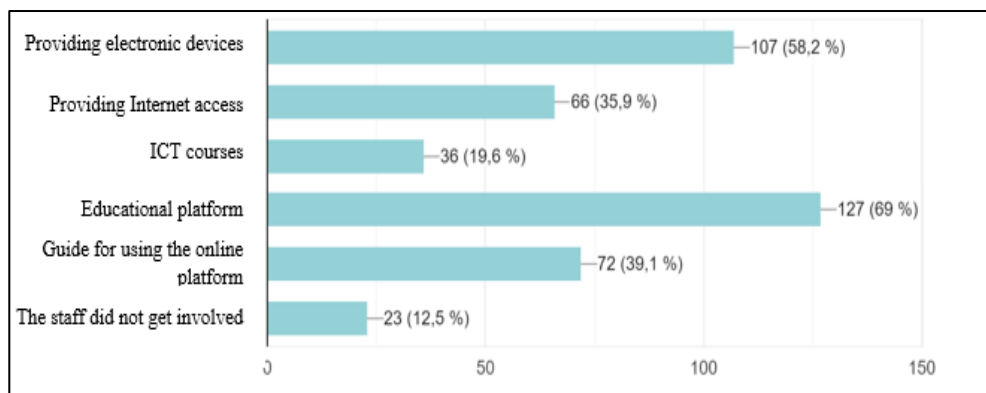


Figure 6: The management staff involvement in providing the necessary support for conducting online classes

Source: Own processing from Google Forms

În Figure 7 I presented the management staff feedback and it can be observed that teachers received positive feedback normally. Also, teachers rarely receive negative feedback or no feedback. It is probably much easier to give a positive feedback than a negative one, if you don't want to demotivate the staff.

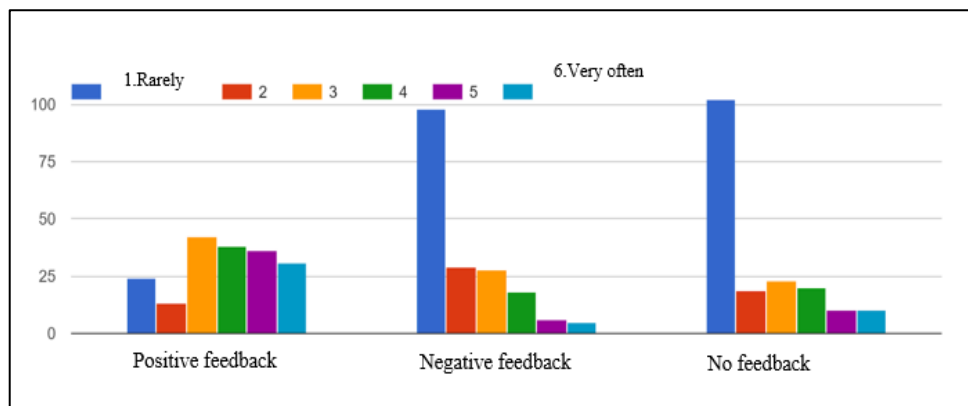


Figure 7: The management staff feedback

Source: Own processing from Google Forms

By asking the teachers how much they agree with the following statements regarding their motivation, we can extract the main advantages of e-leadership,

such as: through e-leadership we learn to adapt more easily to the changes that have occurred, we can develop personally and professionally, we can assert ourselves and get involved in the activities.

About the degree of satisfaction with the activity carried out during the online classes, it seems that the score is somewhere around 4 in almost all cases, which reflects a good level of teacher satisfaction.

Analyzing the results from Figure 8, it appears that there is a direct, linear connection between the degree of motivation regarding the leader's appreciation and the positive feedback he states.

Regarding the negative feedback, it seems that it appears less often than the positive one, the leaders being quite diplomatic when giving feedback to the teaching staff, the average of the answers being around a grade of 2.

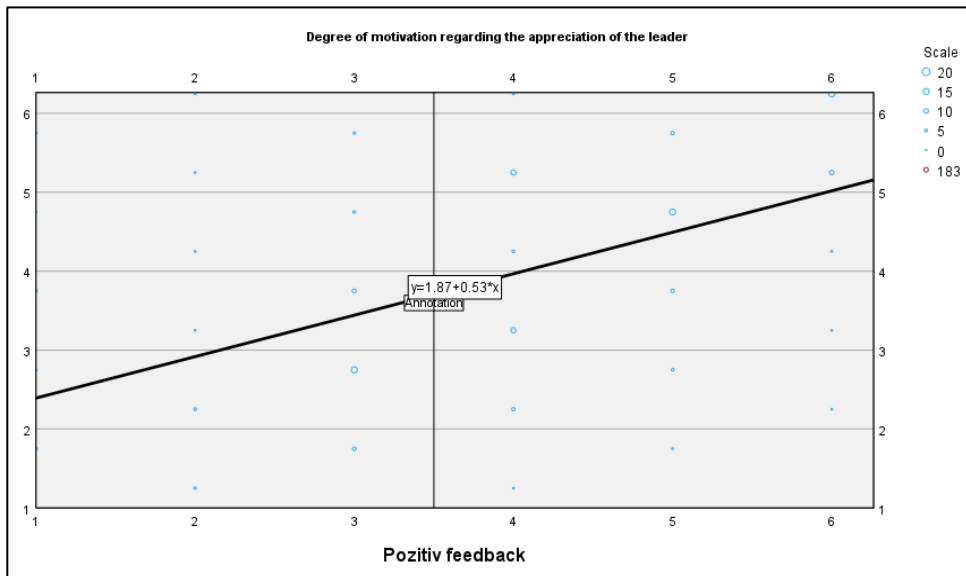


Figure 8: Linear regression between motivation and positive feedback
 Source: Own processing in SPSS

Analyzing the Pearson correlation coefficient ($r = 0.509$), it appears that there is a reasonable relationship between the positive feedback that management expresses and how valued teachers feel. It is interesting that each variable does not significantly influence teachers' motivation, but, cumulatively, they increase motivation. For example, teachers who declare that they easily adapted to the changes, claim that they have developed personally and professionally ($r=0.78$). Also, those who got actively involved had the chance to take part in decision-making ($r=0.675$) and received new responsibilities ($r=0.694$).

Teachers say that they feel appreciated when they can develop personally ($r=0.608$), when they can adapt to the environment governed by changes ($r=0.668$), when they can participate in decision-making ($r=0.750$), highlighting a high correlation between these variables. The probability of error (p) is 0.001,

which highlights a highly significant link between the positive feedback of leaders and the motivation degree of teachers.

5. Conclusions

Among the main advantages of e-leadership we can list the fact that we learn to adapt more easily to changes, we can develop personally and professionally, we can assert ourselves and get involved in additional activities, while barriers such as IT and communication skills can represent real barriers in the smooth development of e-leadership.

Moreover, one of the most important factors in e-leadership is providing positive feedback, as people need appreciation to be productive. It seems that the teachers were motivated during the analyzed period, but there is always room for improvement. Of course, teachers' motivation is also influenced by intrinsic/extrinsic expectations, such as financial remuneration, which are not directly related to leaders' decisions, but this can be the subject of future research.

6. Acknowledgements

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ORGANIZATIONAL PERFORMANCE IS HIGHLY INFLUENCED BY MOTIVATION. A CASE STUDY OF THE PUBLIC HEALTH DIRECTORATE

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Abstract: *High productivity is of primary concern to individuals, the management of any organization and to the national economy at large. Performance management in the health sector is essential for access to health services and for the provision of quality services. It is generally regarded as a well-known fact that an organization's employees are a key asset for success. One of the most fascinating questions for specialists, but also one that causes headaches for managers in organizations, is "why are people motivated to do something?". A human's ambitions and goals may differ from one person to another, so motivation is a crucial aspect of health care management. Management can guide people to achieve the organization's goals by identifying their unique qualities and potentials. The main objective of the study was to analyze the factors that motivate and demotivate employees in the Public Health Directorate, in order to find, or demonstrate that workplace satisfaction is influenced by a combination of factors, each of them having their own effect, contributing to the final result, which can be decisive in creating or not an productive equilibrium within the organizations that were subjected to research. Research methods: qualitative-quantitative analysis through the questionnaire-based survey method. Research thesis: Motivation plays a crucial role in organizational performance. This article concluded that not only financial benefits are important to both male and female employees, but also non-financial benefits and Managers must attach significant importance to motivational factors because these are the only ones capable of guaranteeing the success of such an approach.*

Keywords: motivation; performance management; organizational performance; employees

JEL Classification: A14; M12

1. Introduction

Individual motivation, built on the basis of informative consciousness, has been the control system for people's actions. The motivation system drives individuals to

take action aimed at achieving a craving, thereby stimulating, enlivening, guiding, and preserving action and performance (Alajmi & Alasousi, 2019). Motivation has been one of the key determining factors for human performance and action. In the past, the workforce was believed to be a crucial resource in upgrading the production process of services and products. Despite this, considerable progress is being made. An organization's workforce is motivated when it is inspired to perform better and remain productive. Every organization's most significant asset is its employees, when they are motivated. The reason for this is that motivation is a primary driver of performance improvement for individuals and organizations alike. The rule applies to all sectors, both public and private, and to non-profit organizations. In this regard, motivation has become a central concern among academics, researchers, business managers, and consultants.

An organization's management can contribute to the academic foundation that introduces change and starts development by recognizing the aspects that play a part in individual behavior. When a company's management board examines and acknowledges the motivating variables of an employee's behavior, it will have a conceptual foundation for implementing change within the organization. A specific focus of earlier motivation studies was on motivation as a driving force for human behavior (Ellemers et al., 2004). The conclusions of these studies support the hypothesis that every behavior relating to a single individual is affected by significant determinants that arise from objectified actions. Motivating the workforce is crucial to achieving organizational goals and improving business performance.

It has been shown that once a workforce feels motivated, it will become more energetic, increasing their performance (Pancasila et al., 2020). Motivating the workforce is a way of helping them complete their tasks efficiently and effectively, as well as a goal or result they are trying to achieve. Having a transparent organization's morals, goals, and standards reflects well on the company (Nguyen et al., 2020). Several academic studies have attempted to answer the question: What motivates employees? Therefore, it has become crucial for business managers to find out how to improve employee self-esteem and satisfaction levels. Why does an organization need motivated employees? The answer to this question reaches the heart of an organization's existence. Today's dynamic workplace environment requires highly motivated employees. Employee motivation is essential to the success and survival of an organization. This is because a productive workforce can enhance organizational productivity and enable an organization to reach increased levels of production. The challenge of motivating a workforce is perhaps the most intricate and entangling issue that business managers are facing these days.

2. Literature Review

Motivating is derived from the Latin word "movere", meaning to cause a change of position (Islam & Ismail, 2008). Motivating ourselves changes our feeling of boredom into interest. Motivation is defined as an inner energy that inspires behavior and provides guidance. Theories of motivation can be applied as a way to explain why an individual's behavior occurs. Individuals' motivations can be summarized as the desires they yearn to achieve; the stimulus and the term

motivation refer to the wants, desires, and hopes they harbor within them, which lead them to act in the manner that they do (Walker & Miller, 2009). Human resources and organizational studies regard it as one of the most significant areas of research. According to Kreitner (1995), motivation is the process of the inner mind and mental activity, which provides behavioral motives and guidance and a determination to fulfill needs and wants that have yet to be met (Higgins, 1994). The method is considered to be an effective means of encouraging people to reach their goals. Understanding the variables that motivate the workforce might facilitate job assignments and reward systems for encouragement. In this way, organizations are able to integrate motivating factors into a set of management strategies.

In order to motivate their employees, managers need to focus on two things: the first challenge is motivating employees to work toward the organization's objectives, and the second is motivating them to pursue their own, individual objectives. Psychology specialists have explored human motivation extensively and developed a variety of theories about what motivates people. In the past organizations used to focus primarily on making a profit by simply selling their products, without paying much attention to human resources. After the Second World War, Abraham H. Maslow (1943) opened the way to motivational theory. In the hierarchy of needs, the following assumptions are made at the base of the pyramid: A need becomes more demanding as it is continuously satisfied; a need does not appear to motivate unless the one below it has been satisfied; the appearance of a new need is gradual, not sudden; different people with the same needs may choose different ways, different behaviors to satisfy them based on their preferences. The motivation theory developed by (Herzberg 1959), states that certain factors are closely related to job satisfaction (motivational factors), while other factors are related to dissatisfaction. According to McClelland (1961), three categories of needs are satisfied by the acquired needs theory, also known as the culture and learning theory:

- Need for achievement. When a number of employers are motivated by the desire for achievement rather than by profit. In spite of the fact that such individuals are willing to take a risk, they are very cautious about it since they do not want to fail. Therefore, they avoid tasks that involve too much risk. Contrary to this, people with low achievement needs tend to avoid challenges, responsibilities and risks.

- Need for power. People who have a high need for power are highly motivated to influence others and to take responsibility for their subordinates' behavior. Power-oriented managers feel comfortable in competitive situations and enjoy the roles they have in decision-making.

- Need for association. Managers with a high need for association work collaboratively and have a team-oriented management style. Managers with a high need for association work collaboratively and have a team-oriented management style. A manager with an excessive need for association may lose effectiveness if their desire to make management decisions interferes with their need to make social connections.

Should an organization survive, it has to invest in its employees, for human resources are mandatory to ensure its competitiveness. They are valuable, rare,

difficult to reproduce and relatively irreplaceable (Manolescu, A., 2001). It is imperative to remember that human resource management is not just about hiring individuals to fill vacancies. They must be trained and encouraged to play the significant roles they can fulfill within the organization. Especially in the present socio-economic environment of ambiguity, dynamism and interdependence, many of the challenges or achievements of organizations can be attributed to human resources (Bedrule-Grigoruță, M.N., 2008).

An effective health system is run by competent, trained, and motivated health workers. This must be supported by robust performance management systems to direct the contribution of health workers towards the achievement of expected health outcomes. Performance in the health sector requires qualified people at all levels of service delivery. All motivational strategies and approaches contribute holistically to the focus of employees towards this goal.

Motivation in the workplace refers to rewarding people for their contribution to the progress of the organization. They are responsible for their initiative, effort as well as for the development of their subjective value (Ursu, D., 2005:85).

The motivational environment created by the management of the unit must allow each worker to feel that he is integral to the organization. Employee motivation can be achieved through a variety of variables that would facilitate workforce motivation, and employee motivation would aim to improve employee productivity, and ultimately, organizational performance. Business managers as well as recruiters have played a significant role in the process of motivation in the workplace, according to Flynn (2011), with financial compensation being the most significant motivational variable for employees to improve their work performance. Another set of variables includes organizational connections, working environments, employee desires, safety, fairness, career development opportunities, and fair monitoring mechanisms. Motivational variables will encourage employees to perform more effectively and enhance their morale. Despite the fact that these theories are useful, when it comes to understanding management and motivation from a conceptual perspective, most managers rely on a combination of needs, extrinsic as well as intrinsic factors for motivating employees and helping them accomplish their needs and personal goals to achieve effectiveness within an organization.

Table 1: Satisfaction/dissatisfaction factor

Factors	Relevance to work and environment	Content	Relevance to satisfaction/dissatisfaction
Hygiene (extrinsic)	Establish organizational relationships with the environment	Salaries and other earnings. Job security. Working conditions. Employment policy. Relationship with colleagues and superiors. Professional competition.	The existence of hygiene factors does not increase employee motivation, but their absence creates dissatisfaction and demotivation.

Motivation (intrinsic)	Establish a relationship with self and others	Work performed. Responsibilities assigned. Promotion. Recognition of contribution and effort. Career development.	The existence of motivating factors produces satisfaction when they are present, and their absence does not lead to dissatisfaction.
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Source: Elaborated by the author based on source (Burduş E, Căprărescu G., 1999: 494)

3. Data analysis and results

The research study applied convenience sampling method to identify the motivating and demotivating factors for professional performance. In this research, a structured survey questionnaire is used to collect data by distributing it to employees of the Public Health Directorate. The questionnaire is composed of two parts: the first part includes demographic information, such as age, gender, position, activity duration and the second part includes a set of questions related to the level of satisfaction, need for motivation as well as the set of above-mentioned motivating and demotivating factors. Approximately 55 questionnaires were distributed among employees in different service organisations and 25 valid responses were received (45% response rate).

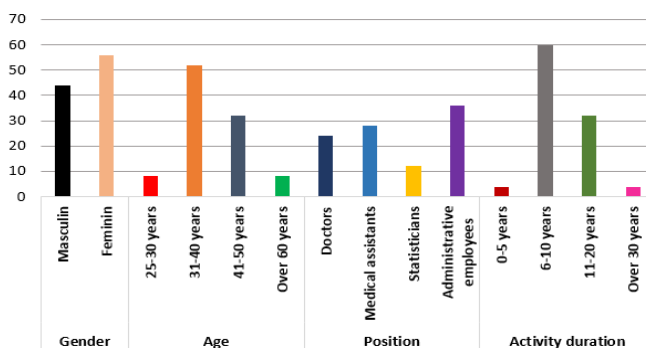


Figure 1: Characteristics of the respondents

Source: Elaborated by the author, based on collected and processed data

As a next step, we proposed to analyze the level of satisfaction and find out the opinion of employees about the need for motivational activities in the Public Health Directorate.

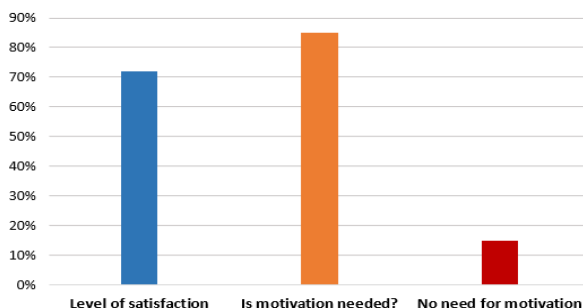


Figure 2: Level of satisfaction and the necessity to motivate employees

Source: Elaborated by the author, based on collected and processed data

After centralizing the results from figure 2, we observe that employees are satisfied with the professional activity they are currently carrying out in proportion to 72%. Among the respondents, only 84% consider motivation to be necessary, and 16% think that stimulating motivation is not that significant.

Our main objective was to analyze how intrinsic and extrinsic factors influence employees.

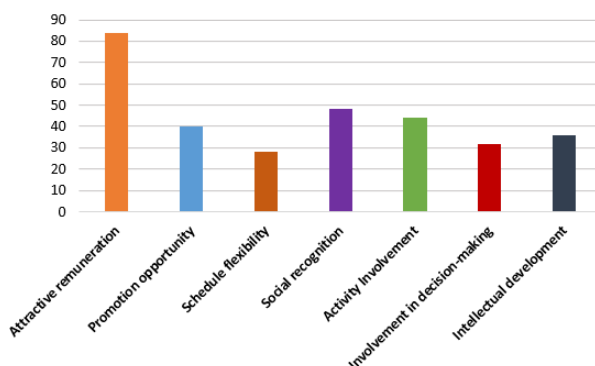


Figure 3: Motivational factors

Source: Elaborated by the author, based on collected and processed data

Based on the results reflected in figure 3, we note that the main factor that most motivates respondents' workplace performance is salary level 76%, social recognition 48%, followed by the activity involvement with 44%. The study indicates that only 40% of the participants are motivated by the possibility of advancing within the organization, 36% by intellectual development and 32% by involvement in decision-making. Only 28% are motivated by a flexible schedule.

The elements that demotivate employees in terms of performance at work are shown in the following figure:

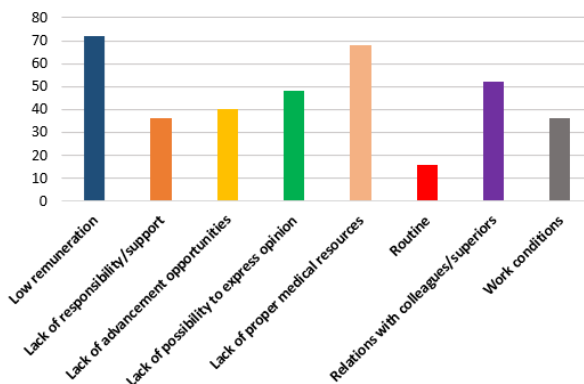


Figure 4: Dissatisfaction factors

Source: Elaborated by the author, based on collected and processed data

From the analysis of the results, following the application of the questionnaire, it resulted that most of the respondents are demotivated by the salary level, 72%. A fair remuneration for our work makes us feel valued and appreciated. Lack of money can cause stress in our personal lives and increase pressure. 68% of the interviewed employees reported a lack of medical resources, resulting in only 52% of them being satisfied by their interactions with colleagues and superiors. 48% of the participants reported a lack of opportunity to express their opinion, 40% feel demotivated by the lack of advancement opportunities and 36% by the lack of responsibility and work conditions. Only 13% are demotivated by routine. Based on the results, there is no significant difference between them. The point is that there is no single factor that causes us to be satisfied at work, only a combination of factors can have this effect. An organization's success depends on this equilibrium.

4. In conclusion

The findings of the research shows that not only financial benefits are important to both male and female employees, but also non-financial benefits. There is a certain level of dissatisfaction among employees when it comes to the lack of adequate tools, resources, and equipment to perform their work. For organizations to be able to stimulate employees, work stability, a collaborative working environment, a competitive salary package, and other relevant fringe benefits must be incorporated into the organization's policy according to each individual employee's performance. Managers must attach significant importance to motivational factors because these are the only ones capable of guaranteeing the success of such an approach. Ultimately, a balance is essential for effective management. To ensure that individual or collective performance is not adversely affected by acute dissatisfaction, it is essential to find a balance in terms of employee satisfaction. This balance boosts performance by finding effective ways to increase employee satisfaction. In this case, employees' engagement and their feedback can be vital to the development of practical motivational programs. Even though this research

focused on a very small group of the Public Health Directorate employees, our hope is that it will serve as a platform for future research covering a larger number of individuals. Whatever the nature of future investigations, it is essential that motivation research continues to be conducted not only to add to the academic literature, but also to help inform managers and other stakeholders about factors that will lead to a more motivated workforce that is willing to do their best for their organizations.

5. Acknowledgements

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IMPACT OF WORKING FROM HOME ON PRODUCTIVITY & PERFORMANCE, EVIDENCE FROM NORTH AMERICAN LOGISTICS INDUSTRY DURING COVID-19 PANDEMIC

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Abstract: *This paper analyzes the impact of shifting all employees from office-based working to working from home (WFH) on productivity and performance. Before the COVID-19 Pandemic, there were no instances of companies moving all of their employees to WFH indefinitely. This is one of the first case studies analyzing this new phenomenon supported by hard criteria for productivity and performance measures. We define productivity as the quantity and performance as the quality of the output. We collected our data from a North American 3rd Party Logistics company and employed a multimethod approach to examine the effects of this organizational change forced by the COVID-19 Pandemic. We gathered data from the employees through video interviews and online surveys. We compiled the performance metrics from the corporate database and received commentary from top management. We also used national statistics databases to delineate the specific market conditions. Figures indicate evident improvements in revenues, profits, and labor productivity after the shift to WFH. We also examined other potential moderating factors, such as changes in market conditions, improvements in business processes, and/or management approaches, to distinguish the effect of remote working. Overall results show that when accompanied by solid leadership strategies and proper communications, and with investment in IT technologies, working from home improves productivity with little or no effect on performance. Our findings offer valuable insights for managers who need to make strategic decisions about WFH arrangements for their companies, especially brokerage-type businesses, more specifically those in the logistics industry. The study is based on data from a case study involving one company, preventing the authors from generalizing their findings.*

Keywords: Telework; Productivity; Performance; Logistics; COVID-19

JEL Classification: D24; O33; M12; M21; M54

1.Introduction

Although many companies already had the technological infrastructure to make remote work at least as efficient as working at the office, no company had ever dared to close their physical locations and ask all their employees to work from

home. This was until World Health Organization declared COVID-19 a pandemic (WHO, 2020). Consequently, companies that were deemed non-essential businesses were forced to seal their office doors indefinitely due to lockdown regulations, although employees continued working from their homes.

Before the Covid-19 Pandemic ('the Pandemic' hereafter), working from home (WFH) was commonly used to describe an arrangement where certain employees spent a portion of their employment hours working remotely (e.g., from home) with the support of advanced communication technologies. In such arrangements, a central office location is always available both to WFH and non-WFH workers. Although pre-pandemic studies overwhelmingly link WFH to positive organizational outcomes (e.g., productivity, performance, absenteeism, job satisfaction, work-life balance, and cost savings) (Hackney *et al.*, 2020), the corporate uptake has been very low. Organizations have been reluctant to increase their WFH intensity as they must have assumed that its challenges (e.g., the need for moving away from direct supervision to management by objectives, legal uncertainties, reduced sharing of implicit knowledge, need for new infrastructure, data security concerns) (Boell *et al.*, 2013) would outweigh its potential benefits. In this regard, for example, Mahler (2012) noted that despite all its advantages, making WFH widespread might bring about organizational complexities, including possible disaffection between teleworkers and non-teleworkers. Therefore, organizations acted cautiously about remote working by limiting the WFH practices to certain employees with regulated frequency (e.g. Turetken *et al.*, 2011, Virick *et al.*, 2010).

The Pandemic has been a game-changer in that sense. Many organizations had to ask as many employees as possible to work from home indefinitely. In the U.S. rate of those who perform most or all of their work from home, at one point, rose to 71% (Parker *et al.*, 2020). This shift posed new challenges for the organizations. Before the Pandemic, except for some pilot projects to understand its implications (e.g., Bloom *et al.*, 2015), it was not common to have a sizeable workforce segment to work away from the office continuously. Therefore, there have been limited studies, if any, analyzing the impacts of such new work arrangements, where all employees work from home indefinitely without any central work location, on a company's performance.

Based on a case study, we examined the effects of switching from a traditional office-based work setting to a full-WFH¹ environment on performance metrics. In this regard, we compared a company's pre- and post-performance metrics. With only a few exceptions, both pre-Pandemic and Pandemic-time WFH studies use self-reported data to measure a company's performance metrics (Hackney *et al.*, 2020). Instead, we used hard criteria, namely data from the corporate ERP database.

In contrast with pre-Pandemic findings, early studies during the Pandemic indicate mixed results in terms of performance metrics. Percentage of research that demonstrates improvement in performance metrics has fallen from 79% to 23% (Hackney *et al.*, 2020). We see this as an indicator that the pre-Pandemic era conventional WFH practices and implications differ vastly from full-WFH settings. Consequently, their outcomes need to be explored with respect to defined contexts rather than being generalized. The current research analyzes the outcomes of full-

¹ Full-WFH: all employees working remotely indefinitely without any central working location.

WFH settings using a case study, which can offer fresh perspectives for brokerage-type of businesses, such as 3rd and 4th Party Logistics (3PL) companies.

2. Impact of WFH on Organizational Outcomes

Telecommuting has been the subject of a vast body of research since the concept was first coined in the 1970s (Nilles, 1975). Scholars used several different terms to identify the practice of employees working away from a central working location, including telework (Bailey and Kurland, 2002), home-based work (Tietze and Nadin, 2011), remote work (Yang *et al.*, 2021), anywhere working (Blount, 2015), or flexible work arrangements (Atiku *et al.*, 2020).

The most commonly used metrics in pre-Pandemic WFH studies to measure organizational outcomes are productivity and performance. Pandemic time WFH studies, on the other hand, mainly ignored the performance numbers and measured productivity (Hackney *et al.*, 2020). We use the same metrics in the study, and we define productivity as the quantity, and the performance as the quality of the output (Turetken *et al.*, 2011). We also analyze the change in company profits as another objective measure of overall organizational output, which, to the best of our knowledge, distinguishes our study from all other research in the field.

Several studies that report on organization output use surveys to collect data from employees that work in diverse industries and rely on self-reported/perceived productivity and/or performance data. For example, Turetken *et al.* (2011) suggested a positive relationship between WFH success (productivity and performance) and rich communication and employee work experience. Similarly, Torten *et al.* (2016) showed a positive relationship between years of WFH experience and productivity, which does not apply to performance. Lippe and Lippényi (2020) reported that although employees who work from home performed better, they negatively affected their co-workers' performance, who never worked from home. Kazekami (2020) determined that WFH increased productivity as long as companies could strike the right balance between office hours and WFH hours. Davidescu *et al.* (2020) found that WFH improved productivity and recommended a hybrid model mixing office working and WFH practices.

There are industry-specific studies that have reported productivity and performance gains with WFH; e.g., Tustin (2014) in higher education/academia, Vega *et al.* (2014) and Tietze and Nadin (2011) in the public sector, and Delanoetje and Verbruggen (2020) in construction.

A small number of studies use hard criteria to measure the productivity of workers. Analyzing the data from an experiment in a large travel agency in China, where some workers switched to full-WFH mode for nine months, Bloom *et al.* (2015) detected a 13% increase in performance. Dutcher (2012) concluded that WFH practices might increase productivity for creative tasks while negatively affecting the same for dull tasks.

The Pandemic era research primarily focuses on the changes in perceived productivity rather than performance. Analyzing the output of the software developers, Ralph *et al.* (2020) found that WFH had a diminishing effect on their productivity and well-being. Atiku *et al.* (2020) reported improved productivity based on data from employees working in diverse sectors in several African

countries. Chapman et al. (2020) concluded that medical researchers were able to complete more tasks while working from home during the Pandemic. In a mixed-sector study, Toscano and Zappalà (2020) found evidence that productivity deteriorated due to social isolation caused by WFH during the Pandemic. Bucurean (2020) surveyed mixed-sector employees, in which only 43% reported improved productivity, while 57% said the opposite. Based on a survey of public sector workers, Drumea (2020) reported deteriorated productivity. Beno and Hvorecky (2021) determined that productivity fell among the service workers of a sports and leisure company in Austria. Naor et al. (2021) collected organization-level data from diverse sectors in Israel, where three of the six companies stated improved productivity. Farooq and Sultana (2021) found a negative relationship between WFH and productivity among hospitality, banking, and information technology employees during the Pandemic in India.

The conflicting results regarding productivity during the Pandemic can indicate that the full-WFH settings must be analyzed contextually, such as business sector or type of work performed. Pandemic-era studies inevitably report relatively premature results as they collected their data when companies experienced only a few months of full-WFH practice without much planning. Therefore, more research is needed to analyze longer-term effects. We should also note that switching to a full-WFH setting is a new phenomenon for organizations, which differs vastly from the research on WFH settings conducted before the Pandemic. This paper is the first study in the literature to analyze the effects of switching to full-WFH on productivity and performance using hard criteria with a multimethod approach spread over a year.

3. Methodology

Traffix Inc. (Traffix hereafter) is a light-assets-based 3rd party logistics company headquartered in Milton, Ontario, Canada serving customers throughout North America with branches in Canada, U.S., and Mexico. Traffix's primary source of revenue is overwhelmingly brokerage services that match shippers with carriers.

When the Pandemic hit, to ensure its employees' safety and comply with government regulations, Traffix suspended office-based work and switched to WFH. Traffix already had the necessary IT infrastructure before the Pandemic and has allowed some employees to work from home occasionally to accommodate specific personal or business needs. Thus, the transition to WFH was a relatively smooth operation from a technological standpoint.

To capture the effects of the new work setting more reliably, we employed a case-based multimethod approach.

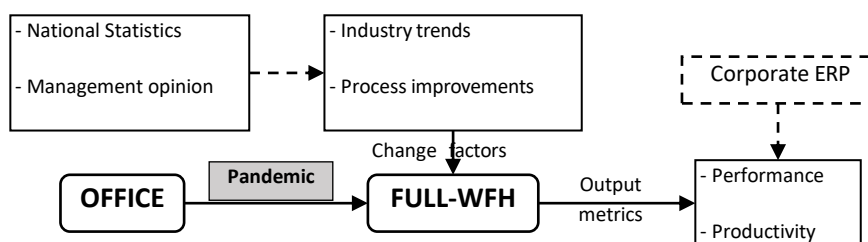


Figure 1 displays the research analysis framework.

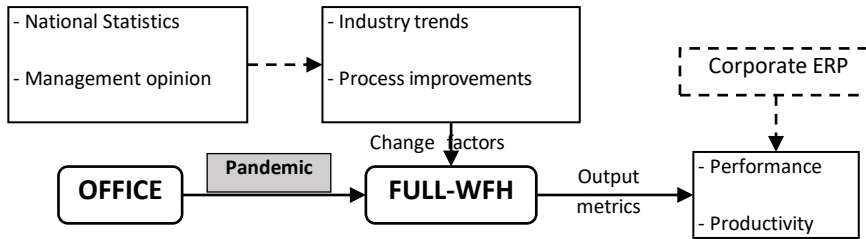


Figure 1: Research Analysis Framework

We gathered the case data using the following four primary tools:

(1) Three months after the Pandemic, during July and August 2020, we conducted video interviews with 12 employees selected based on their level of seniority in the company. **(2)** After about one year from the start of the Pandemic, employees filled out online surveys (using Qualtrics®) on how they perceived the implications of full-WFH compared to working at the office. **(3)** Traffix provided us with hard data on several KPIs (key performance indicators) extracted from their corporate ERP database measured monthly from January 2018 to March 2021, which we used to analyze the changes in labor productivity and performance and the company's bottom line. **(4)** Once we completed our initial data analysis gathered from the aforementioned sources, we received written commentary from Traffix top management regarding how they interpreted our findings.

4.Results: Productivity and Performance

As a light-assets 3PL, Traffix makes the bulk of its revenues from the brokerage services between the shippers and the carriers. Traffix employs three main types of staff, which constitute more than 75% of the whole workforce. [1] Customer Sales Staff (CS): finds the loads to be shipped, [2] Carrier Sales Staff (RS): finds the carriers to transport the loads, and [3] Service Representatives (SR): assists CS and RS in fulfilling clerical tasks. CS and RS are compensated with a fixed salary plus commissions based on the profits from each load shipped as a result of their work. SRs, on the other hand, are compensated with a fixed salary. Thus, the operations of Traffix are driven by CS and RS supported by SRs. We define the total number of CS and RS as the total number of Operations Staff (OPS = CS + RS).

Traffix provided us with data from Jan 2018 to March 2021. For confidentiality reasons, Traffix did not reveal the actual revenue and profit figures. Therefore, we measured the revenue growth using the number of loads fulfilled each month (L). And for profit, we use a monthly index calculated through the rate of change in profits (over nominal \$ value). The profit index is a measure based on the price and the cost difference, so it does not incorporate the overhead costs.

$$P_{i+1} = P_i \times PC_{i+1}$$

Where:

P_i : Profit index for month i , PC_{i+1} : rate of change in profits from month i to month $i+1$ (provided by Traffix), and $P_{Jan18} = 100$ (Profit index for January 2018)

Profit Margin for a load measures the difference between the price charged to the customer (shipper) and the price paid to the carrier. Monthly profit margin (PM) is the average of profit margins from all loads fulfilled during any given month.

$$PM_i = \frac{\sum_{n=1}^{N_i} P_{in}}{N_i} \quad (2) \qquad P_{in} = \frac{(PS_{in} - PP_{in})}{PS_{in}} \quad (3)$$

Where:

PM_i : Profit margin for month i , P_{in} : Profit margin for load n in month i , PS_{in} : Sales price (charged to the shipper) for load n in month i , PP_{in} : Purchasing price (paid to the carrier) for load n in month i , N_i : Total number of loads fulfilled in month i .

Although researchers may compute productivity and performance figures differently from case to case, the definitions embrace common characteristics, such that productivity being about the quantity of the output and performance being about the quality of the output (Tangen, 2005). Accordingly, we take PM as a metric to analyze the company performance, namely the quality of the output, whereas we use ML to measure productivity, namely the quantity of the output. To examine the effects of WFH more precisely, we also computed the overall labor productivity in terms of loads fulfilled and profit index.

$$LPL_i = \frac{L_i}{OPS_i} \quad (4) \qquad LPP_i = \frac{P_i}{OPS_i} \quad (5)$$

Where:

LPL_i : Labor productivity based on the number of loads fulfilled in month i , LPP_i : Labor productivity based on the profit index in month i , OPS_i : Total number of operations staff in month i .

Traffix displayed a high growth trend since it moved to full-WFH (**Figure 2**). It has already been steadily increasing its revenues before the Pandemic, although its profits mainly remained unchanged (**Figure 3**), as reflected by the declining profit margins (**Figure 4**).

Traffix revenues, profits, and profit margin display an upward trend from early 2018 to mid-2018. However, from mid-2018 to the start of the Pandemic, revenues continued to rise slower, and profit margin was on a downward trend, with a slight fall in the profit index. After moving to full-WFH, revenues and profits grew faster, while profit margins mainly remained steady at around 15%.

The number of operations staff has also been steadily increasing on par with the revenue growth. Between Jan 2018 and March 2021, revenue, profits and the size of the operations team almost tripled. Labor productivity can be measured in terms of profit per operations staff or loads per operations staff, both of which indicate a sharply increasing trajectory (Figure 5). The reason 'profits-per-OPS' increased faster than the 'loads-per-OPS', although PM remained around the same, is the considerable hikes in market prices for truck-based freight (verified by Traffix sales data).

Labor productivity peaked in August 2018 and showed a steady downward trend before shifting its direction upwards again at precisely around the start of the Pandemic. Labor productivity caught up with its peak levels one year after switching to full-WFH. In August 2018, Traffix had 105 operations staff. As the staff numbers gradually grew to the level of 180s just before the Pandemic, labor

productivity hit its lowest point. Traffix was employing 216 operations staff in March 2021, when it hit back to its highest labor productivity levels.

As a non-operations metric, we checked Accounts Receivable (AR) overdue ratio that assesses finance department employees' performance. It represents the ratio of outstanding receivables from customers. Lowering the AR overdue ratio improves the cash flow of the company. ERP data shows a trajectory of the metric, which follows a marginally downward trend between Jan 2018 and the start of the Pandemic. After that, we observe a noticeable decrease (81% to 65%). Traffix officials stated that they put some concerted effort into targeting overdue payments since the beginning of the Pandemic, which yielded results even when all staff worked from home.

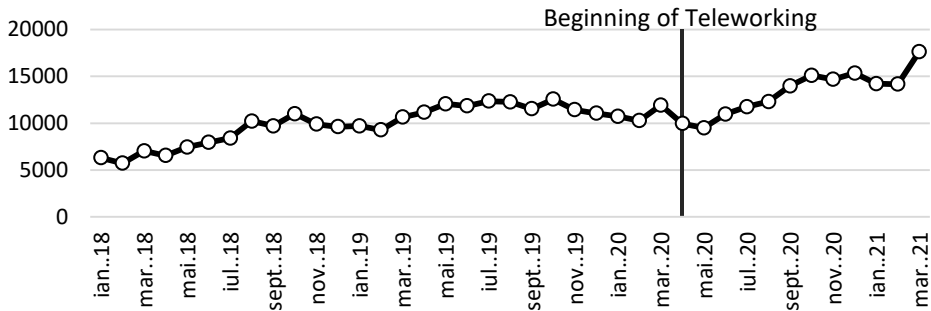


Figure 2: Monthly total number of loads (L) fulfilled by Traffix.

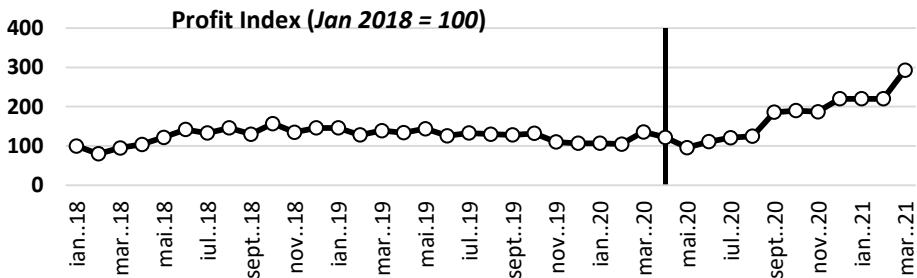


Figure 3: Monthly profit index.

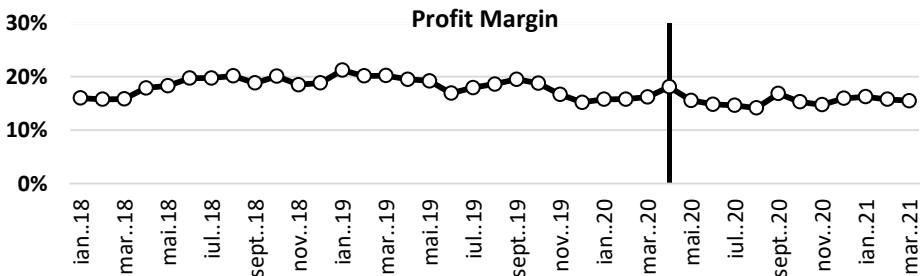


Figure 4: Monthly profit margin

Labor productivity peaked in August 2018 and showed a steady downward trend before shifting its direction upwards again at precisely around the start of the Pandemic. Labor productivity caught up with its peak levels one year after switching to full-WFH. In August 2018, Traffix had 105 operations staff. As the staff numbers gradually grew to the level of 180s just before the Pandemic, labor productivity hit its lowest point. Traffix was employing 216 operations staff in March 2021, when it hit back to its highest labor productivity levels.

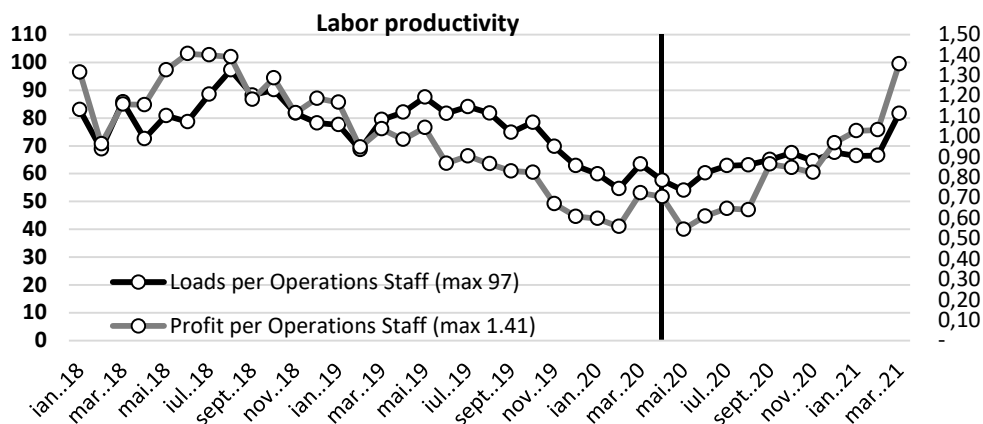


Figure 5: Labor productivity measured by profit index and the total number of loads

As a non-operations metric, we checked Accounts Receivable (AR) overdue ratio that assesses finance department employees' performance. It represents the ratio of outstanding receivables from customers. Lowering the AR overdue ratio improves the cash flow of the company. ERP data shows a trajectory of the metric, which follows a marginally downward trend between Jan 2018 and the start of the Pandemic. After that, we observe a noticeable decrease (81% to 65%). Traffix officials stated that they put some concerted effort into targeting overdue payments since the beginning of the Pandemic, which yielded results even when all staff worked from home.

5.Results: Employee Perceptions

We invited a total of 351 employees to fill out an extensive survey in five parts over three months. Column titled "n" in Table 1 shows the number of respondents in each survey. Around 62% of the respondents are male, 55% are from Canada, 42% are from the U.S., and 3% are from Mexico. About half of the respondents are operations staff (29% CS, 24% SR, 23% RS, 15% management, and 9% finance department staff). Employees from 10 branches out of 13 completed the survey. Although the sample represents a veteran group with an average work experience of 16.3 years and an average industry experience of 9.7 years, former involvement in some form of WFH is significantly low, with an average of 1.4 years. Table 1 summarizes the survey results measuring employee perceptions before and after moving to full-WFH for several attributes. Each attribute is assessed based on scales that have been shown to be reliable in related literature. Respondents answered multiple questions for all attributes using a Likert scale from 1 to 5.

Employees responded to each question twice, reflecting first on their perceptions when work was at the office and then when working remotely. All response sets were analyzed statistically using T-test (paired two samples for means) to understand whether the difference between sample means from office work and full-WFH was statistically significant. Employee perceptions during full-WFH were improved for most attributes.

Table 1: Summary of employee survey results*

Attributes	Means		Difference		n	Nature of Deviation
	Office	WFH	Deviation	Stat. Sig?		
[1] Employee Burnout	2.81	2.72	-0.09	YES	103	Favorable
Emotional Exhaustion	2.69	2.37	-0.33	YES	103	Favorable
Personal Accomplishment	3.72	3.80	0.09	YES	103	Favorable
Depersonalization	2.03	1.99	-0.04	YES	103	Favorable
[2] Job Stress	3.52	3.36	-0.16	YES	103	Favorable
[3] Work Engagement	3.69	3.85	0.16	YES	103	Favorable
[4] Improvisation	3.368	3.369	0.001	No	103	N/A
[5] Psychological Safety	3.53	3.61	0.08	YES	84	Favorable
[6] Human-Computer Trust	3.45	3.62	0.17	YES	70	Favorable
[7] Workplace Gossip	2.78	2.75	-0.03	YES	70	Favorable
Job-related	2.99	3.02	0.02	YES	70	Unfavorable
Non-job-related	2.57	2.48	-0.08	YES	70	Favorable
[8] Workplace Trust	3.80	3.91	0.12	YES	76	Favorable
Trust in System	3.72	3.85	0.13	YES	76	Favorable
Interpersonal	3.87	3.97	0.11	YES	76	Favorable
[9] Leadership	3.67	3.92	0.25	YES	76	Favorable
Task-oriented	3.71	3.88	0.17	YES	76	Favorable
Leadership-oriented	3.62	3.95	0.33	YES	76	Favorable
[10] Work-Life Balance	3.31	3.41	0.10	No	72	N/A
[11] Time Scarcity	2.50	2.33	-0.17	YES	72	Favorable
[12] Monitoring	2.51	2.40	-0.11	YES	72	Favorable

Stat. Sig?: Statistically Significant?, **n:** Sample size; the number of respondents.

Attribute scales are adapted from: [1] (Maslach and Jackson, 1981), [2] (Keller, 1984), [3] (Schaufeli *et al.*, 2006), [4] (Moorman & Miner, 1998), [5] (Edmondson, 1999), [6] (Gulati *et al.*, 2019), [7] (Kuo *et al.*, 2015), [8] (Gould-Williams, 2003), [9] (Liao, 2017), [10] (Brough *et al.*, 2014), [11] (Bond and Feather, 1988), [12] (Stanton and Weiss, 2000).

6. Discussion and Conclusions

Before the Pandemic, despite its many advantages, WFH practices had never become the norm, although some companies allowed certain employees to work remotely at specified times. In such arrangements, though, there is always a common office location where staff members work together when they are not working remotely. Due to the Pandemic and the lockdown regulations enforced by governments worldwide, many organizations had an opportunity to experiment with the full-WFH environment for the first time. Previously, a few experimental pilot

projects have compared the productivity of those working at the office and those working remotely. Nevertheless, we had never had cases before the Pandemic, where we could compare the productivity of a group of employees working at the office and the productivity of the same group when they were all working from home with no common office location for an indefinite time.

In this study, we analyzed the case of Traffix, a North American logistics company, from that perspective. We argue that the effects of significant organizational changes, such as the shift to full-WFH, should be examined contextually. This study offers important insights as companies begin to make long-term strategic decisions about their working environments after the Pandemic.

Although Traffix already had the necessary infrastructure to switch to full-WFH before the Pandemic, the management has not considered the option. Traffix had not previously offered regular WFH accommodations to most staff members. Companies usually have been hesitant and skeptical about WFH, and have only adopted it partially for specific roles as they thought it would pose several managerial challenges. Answering a question during the interviews about how their approach regarding WFH changed with the experiment, one top Traffix official commented:

"Day and night... We had a fear of it. We experienced failure with some individuals who worked from home. We didn't have branches close to them, so they had to work from home when we hired them, which was unsuccessful. We actually didn't believe in it, and then we were forced in March to re-evaluate, and we are significantly more supportive now."

We observed significant increases in critical organizational outcomes, including revenue, profit, and labor productivity, although performance (measured by average PM) has remained primarily unchanged. We can argue that as business volume and labor productivity continued to increase, management and the employees had to spend more time handling the demand with less or no time to focus on improving the PM. Another possibility is that a lower PM is the basis of the cost-oriented competitive factor for Traffix, which plays a role in bringing in more business to the company.

Although we see evident improvements in revenues, profits, and labor productivity after the shift to full-WFH, further analysis is necessary to show the causality, even though enhanced employee experience is a supporting factor. There might be other moderating factors, such as changes in market conditions and improvements in business processes and/or management approaches.

With the Pandemic, economies worldwide suffered dramatically, while some specific sectors thrived thanks to the opportunities created by the new way of life during the lockdowns (Sharma, 2020). GDP in the truck transportation industry has declined after the pandemic². Despite some positive adjustments, it never returned to its pre-pandemic levels when this paper was written in Canada or the United States, two major markets for Traffix. So, we can suggest that the post-pandemic sales growth of Traffix does not correlate with the growth trend in the relevant industry.

² Taken from Statistics Canada and United States Bureau of Economic Analysis

Traffix officials have confirmed that there have been no significant changes in their business processes since they moved to full-WFH. We asked a top management team member how they interpreted these positive results and whether they saw a correlation between them and the success of full-WFH. Traffix management agrees that part of this success is related to increased labor productivity thanks to full-WFH:

"(...) - tens of thousands of hours have been given back to employees that were previously spent commuting, and we hope the reallocation of that time to more enjoyable activities in their personal lives has precipitated in greater overall career satisfaction. (...), our general feeling is that WFH has improved productivity in the range of 10%."

The management attributed their achievements during the Pandemic also to three other factors; (1) continued sophistication of their technology, (2) maturation of their business model in some of their newest branches, and (3) some specific favorable market conditions.

Employee experience survey results suggest that during the full-WFH, employees' work experience has improved on several dimensions. Traffix employees reported less burnout and stress levels with increased work engagement and an improved sense of psychological safety. In addition, they became more confident in the system with more trust in the management, their co-workers, and the IT systems. As a result, they could use their time more efficiently while enjoying more care from the leadership for their well-being. Especially, positive perceptions towards relationship-oriented leadership have increased significantly, which is an indication that management put extra emphasis on following up on the well-being of their employees as mentioned by a top-level manager.

There are apparent benefits of full-WFH, such as decreased real-estate and utility costs, the ability to hire talent from any geographical location (Traffix has already started listing 'fully remote work' among the incentives in its vacancy ads to attract best talents), and the elimination of daily commute for workers. Our findings suggest that if accompanied by the proper leadership strategies, and investment in communication and IT technologies, full-WFH will increase labor productivity, specifically in brokerage-type businesses, where operations staff are partly compensated based on their work output. That said, there is evidence that a hybrid approach may produce even better results. Our video interviews and other recent surveys (Decloet, 2021; Menabney Darren, 2020) indicate that most employees prefer some form of a hybrid approach. Yang et al. (2021) have shown that although most tasks can be accomplished working from home with no harm to productivity, levels of collaboration among employees may deteriorate over time, negatively affecting the innovative capacity of organizations. Parallel to this argument, Traffix management was considering a mixed setting after the Pandemic at the time when this paper was being written.

Limitations and Future Research

This study is based on a case study from a company in the logistics industry, and may not offer sufficient insights for generalization. We were able to show some causality between full-WFH and increased productivity, but it may not be possible to quantify the magnitude. So, we relied on company management's estimate. We

focused on productivity, performance and profit metrics. Future research can include other metrics such as absenteeism, turnover and cost savings. This study was funded by Conestoga College Traffic Inc.

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THE PRINCIPALS' STRESS IN BEDOUIN SCHOOLS IN ISRAEL DURING CORONA PANDEMIC

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Abstract: *The aim of this research is to explore the stress of the principals in Bedouin sector schools in Israel concerning remote teaching during COVID-19 pandemic. The interviews included eight (8) open-ended questions and were conducted with three (3) principals from different Bedouin schools in Negev concerning stress at work in the shadow of COVID-19. The main finding of this research is that the school principals in Bedouin were experiencing high levels of stress concerning distance teaching in the shadow of COVID-19 pandemic. The research findings also show that there is a lack of resources for remote learning among students in the Bedouin population, which was associated to the lack of the school principals' control over teachers during the COVID-19, and was related to changes in the students' behavior.*

Keywords: *Bedouin; stress work; school principals; resources; COVID-19.*

JEL Classification: *I21*

1. Introduction

The spread of the Corona virus has led to almost the complete closure of all schools in the world. In mid-March 2020, following the spread of the Corona virus, the Israeli education system was closed and switched to remote learning. Closed schools have far-reaching social and economic consequences affecting the general public of students, parents and teachers, especially students of low socioeconomic status (Dahan et al., 2020). In addition, students of low socioeconomic status are limited in their ability to produce educational content appropriate for remote learning. According to data published by the Ministry of Education, it is not possible to know which population had used digital content or watched the broadcast (Weisblai, 2020). Also, Bedouin schools still lack physical and human resources. More than a third of the Bedouin population still lives in settlements that lack infrastructure (Alasad, 2016). One of the most difficult problems facing Bedouin education in the Negev is the lack of proper teaching-learning and poor physical infrastructure in the existing education system (Weisblai, 2017). In addition, all recognized Bedouin areas are included in the lowest socio-economic cluster (Tirosh, & Eyal, 2018). This is the poorest and most vulnerable population in Israel. The standard of

living for the Bedouins, particularly those living in unrecognized villages, is much lower than the average standard of living in Jewish communities, and even in most Arab communities in Israel (Abu Ras, 2011). It is clear that many students in Israel do not have internet connection and lack resources for remote learning. Furthermore, due to COVID-19, school principals in the Bedouin sector had to deal with the reality of school closures and the transition to remote learning, and with a number of new demands and stress associated with the unexpected situation of preparation and coping. More specifically, this crisis has dramatically changed the perceptions of principals and the ways they exercise their leadership (Harris, 2020). In addition, there are significant challenges that school principals have to deal with. According to Van Lancker & Parolin (2020), one relates to students from low socioeconomic levels, and the need to allocate educational materials, computer and Internet connection to meet these students' needs. Another important challenge is that school leaders work to guarantee students' emotional, social and supportive well-being (Harris, 2020). In addition, many negative situations such as stress, fear, and anxiety experienced by teachers during the COVID-19 pandemic have also become an important problem faced by school principals (Karakose, et al, 2022). Furthermore, school principals had to cope with changes such as operating procedures and regulations, working arrangements of teacher staff, and the health effect of the COVID-19 Pandemic on their teacher staff, students, and the families (Karakose, et al, 2021).

Conversely, as far our knowledge goes, no reports have examined principals' stress during the COVID-19 pandemic in the Bedouin schools in Israel. Consequently, the present research explores the stress of the principals in Bedouin sector schools in Israel concerning remote teaching during COVID-19, stress demands of school principals, feelings and work difficulties, stress work, and lack of resources for remote learning.

2. Principals' Stress in COVID-19 Pandemic.

The world of work expanded by school principals in terms of complexity and quantity (Andreyko, 2010). Research literature has pointed to a variety of factors related to school management stress before COVID-19 Pandemic. The research, which dealt with the management in school in Israel and all over the world, identified various factors of stress such as: work overload (Denecker, 2019; Perry, 2016; Boyland, 2011), role overload, and even lack of social support (Bauer & Stephenson, 2010), lack of principals ability to meet tasks, inability to make decisions and perform them (Alasomuka, 2019), conflicts between teachers themselves and between teachers and principals (Trenberth & Dewe; 2005, Alasomuka, 2019), lack of trust between principals and parents, sizes of schools (Ozer, 2013), and stress that comes from teachers and parents (Fridman, 2002; Mahfouz, 2018). In addition, during COVID-19 Pandemic,

also teachers staff faced significant stress factors related to their works (Karakose, et al 2022).

However, the spread of the Corona virus has led to almost the complete closure of all schools, and changed the perceptions of school principals and the ways in which they exercise their management. With this sudden change, the school community was not ready for this change. These changes have increased stress on school principals, and the school principals were concerned about the students as well as the lack of resources available to them.

3. The Conservation of Resources theory (COR)

The conservation of resources theory is based on the principle of motivating people to protect their existing resources (conservation), and acquire new resources (acquisition); for example, physical, social, biological and personal resources. The theory shows that individual pressure can be determined in relation to resource loss (Hobfoll, 2001, 1989).

According to Halbesleben et al (2014), the theory is based on the principle of motivating people to protect their existing resources (conservation) and gain new resources (acquisition). (Resources are defined here as the extent of what is perceived by a man to help him achieve his goals). Here, the resources are: the objects, situations, personal characteristics and energies that the individual values as central to him and allow him to acquire, maintain, care and protect what he can.

According to Hobfoll et al (2018), resource less people and organizations are more vulnerable to resource loss and less able to gain resources. According to the principle of the spiral loss, proposed by Hobfoll (1989, 2001), people with a lack of resources are more likely to suffer more losses. This theory considers erosion as an emotional state characterized by the process of losing the employee's energy. It highlights the negative spiral decline of Hobfoll (1989, 2001), which explains the process of burnout as a result of work stress.

According to the resource conservation theory, burnout results from a combination of resource loss due to a significant investment of energy, time, and family time borrowed for the job, and the individual's inability to accumulate resources- difficulty in filling the lost resource pool. In other words, once resources are depleted, the individual enters into negative outcomes such as reduced job satisfaction, decreased commitment to work, and poor performance. Bedouin school principals have faced job pressures as a result of a lack of resources.

Following this principle, school principals will find themselves in the process of losing resources. Resources are the same as energies, personality traits, and means of getting objects; therefore, work pressure is created (Kyte, 1994).

As a result of the loss of resources at work, the individual experiences a gradual increase in distress and depression (Kyriacou, 2001). It affects

work-life balance, and mental and physical exhaustion affects work satisfaction (Mahfouz, 2018; Ross & Vasantha, 2014; Wanget al, 2018).

COR theory proposes the elimination of the negative stress responses. COR theory also suggests several key corollaries, which are suitable for building the complex strategies required to cope with large stressful situations at an individual or organizational level (Hobfoll et al (2018).

In addition, COVID-19 Pandemic, multiple work requirements, lack of resources, and job stress in remote learning with students, teachers and parents, misfit between humans and their environmental capabilities, will be associated with work stress. However, incompatibility predicts negative relationships, such as stress and effort to improve compatibility (Edwards et al, 1998).

4. Methodology

In order to obtain relevant and authentic information about the management of school principals' stress during COVID-19 Pandemic, the interviews were the main method of data collection for this research. The aim of the interviews was to elicit the participants' perceptions of the principals' stress during COVID-19 Pandemic. The interviews in a qualitative method can also examine in depth the issue of principals' stress during COVID-19 Pandemic. This method further provides a comprehensive analysis of the research problem (Creswell, 2014).

Interviews were scheduled and conducted at the participant's school, or at a convenient location for the participant's selection. This smaller group of samples allowed the researcher to gain a deeper understanding of the work characteristics of school principals in the Bedouin sector during COVID-19 Pandemic. The interview included open-ended questions with 8 items on various topics related to school management: stress of principals, COVID-19 Pandemic, feelings and work difficulties, and lack of resources for remote learning.

5. Data collection

Each interview was approximately 1.5 hours, conducted with three (3) principals who were selected from different settlements: (1) from Elementary school, (1) from Junior high school and (1) from High school, with different years of experience. In accordance with research ethics, the names of the participants remain anonymous. The researcher use letters with numbers instead of their real names. The interviews took place in December 2021. There was sufficient time for the participants to expand on their answers. Each interview was tape-recorded and transcribed by the interviewer (researcher), and included principals' stress during COVID-19 Pandemic, feelings and work difficulties, and lack of resources. These topics were then used as the basis for the later analysis. The characteristics of the participants are in the following Table:

Table 1: Characteristics of the participants

Names	Gender	School Type Experience	MANAGEMENT Interview Duration
A1	Male	Primary school	20 85.53
A2	Male	Junior High school	12 83.20
A3	Male	High school	8 78.20

6. Results

The results are described using the main causes identified in the interviews, which were clearly associated with the stress of the school principals during COVID-19 Pandemic: lack of resources for remote learning, stress work, feelings and difficulties, high stress related to the teachers and the parents.

All 3 participants spoke of difficult feelings, especially since the government decided to close the schools and shift to distance learning without prior knowledge, the "feeling is very difficult", that led to stress feeling. The feelings by school principals are as follows:

"You do not know how to deal with the students and teachers' unstable situation. We could not predict when we come back to the schools, and whether or not the distance learning will continue at the long run. How would we communicate with the students...? There was an intense fear of the disease itself (Covid19). (A1).

"In the beginning, the feelings about the pandemic were very serious, and we were not ready for teaching. This imposed a new management type on us. We didn't possess the electronic systems neither for the teachers, nor for the students. There were no computerized programs for the students and the teachers, and a part of the students could not be reached due to the lack of communication means with them" (A2).

"Remote learning was a strange introduction to us. It was not a lived experience before. These are pressures on me and the group, and the technologies created more difficulties to us and to other people outside the faculty. All of a sudden, the students did not attend to schools, something that created more pressure on us" (A3).

In addition to the stress of the school principal, we observed difficulties in preparing for distance learning and how they prepared themselves for it with the school community during Covid-19; which were as follows:

"Everything was scattered. At first, we didn't know where to start. A large part of the students had no remote learning resources and no internet connection; few numbers of students were able to have connection with teachers. In addition, a high percentage of students and teachers do not know how to use Zoom. We started with staff and staff phone calls with students and then were able to work with a very small group of students, because the rest had no internet connection

and were given tasks that teachers prepared for them and then delivered to them" (A1).

"In the beginning, the students' interaction was low. Bit by bit, the students began communicating after being introduced to the Zoom and remote learning. At a later stage, the Ministry of Education distributed a limited number of computers over a number of students (14% of the total students). Yet, this was not a solution for a part of the students, since limited number of students attended the Zoom classes. There was a chance to distribute these lessons over the students who do not have communication means. Despite all these attempts, 50% of the students remained without solutions for these problems" (A2).

"There were only few teachers who have experience and knowledge about the remote learning issue. We met a part of the teachers in spite of the danger of contract and Corona infliction. Thereafter, we communicated with a part of the students through the videos on how to use the Zoom; and then we brought groups of students through the WhatsApp, according to the grade, and, later, the teachers were trained on the use of Zoom" (A3).

Another finding of the study is the lack of control of school principals with teachers during the COVID-19 pandemic. School principals faced difficulties in controlling both students and teachers during distance learning, lack of control over some teachers while performing their task, and lack of contact between teachers and principal in zoom lessons.

On the other hand, The Ministry of Education has determined that school principals must manage the application of distance learning, teaching activities, and that teachers' job was to fulfill their commitments during the Covid-19 period. The interviewees described the situation as follows:

"Difficulties to deal with the students during distance learning: how to teach the teachers the use of the technological equipments, evaluate the students, and control the teachers. Both the teachers and students lacked the desire to work during these conditions" (A1).

"There were social problems that the principal and the teachers suffered from due to the lack of direct contact between the teacher and the principal. The problems included inability to solve the problems of the teachers and students, loss of control over the students by both the principal and the teachers, especially attending the classes, and cooperation with the teacher in the class" (A2).

"The classes were disturbed, and there were the cameras problems between the male and female students. There was no control over the behavior of the students during the classes, who negatively utilized this condition. Furthermore, the parents and guardians intervened in the educational process in undesired manners. For instance, there were fathers or mothers who come with the students and interfere in the classes inappropriately" (A3).

In addition to the lack of control, school principals have evaluated their work as stressful during the very recent period. The students were complaining about joining the class with the teacher and the student

participation rate is very low in most of the classes. It was difficult to work with stress and an increase of the parents' complaints about some teachers. All these factors made the work of teachers a stressful job, both between parents and school principals, and were reported as follows:

"Work was extremely difficult, and what was on at work was almost out of control by the teacher and student. There was a feeling of frustration, such as increase of the parents' complaints about some teachers, and lack of instruments to manage the educational process, as well as difficulty in allocating the teachers' works" (A1).

"Based on the results, it was an unprecedented step, such as the rate of the students' attendance in the Zoom classes. In the beginning, there was interaction to a relatively accepted rate. But, when the students felt that the teacher is remotely teaching instead of face-to-face, the attendance rate did not improve. Yet, there was a dropout rate among the students as a result of distance learning" (A2).

"At the outset, the teacher is available at home, uncontrolled, unseen, which created a negative opportunity among some (unprincipled) teachers who ignored their duties and did not fulfill their commitments in this area. Still, there are other teachers who are committed to their duties and were available for satisfactory performance" (A3).

The principals evaluate teachers' performances and examine the distance learning. They said that the teachers are not equal in the instructional processes in distance learning during the COVID-19 pandemic. They described this situation as follows:

"Teachers who possess responsibility are always in the classroom normally, and communicate with the students on daily process. They offer all what they could to the students of homework. Teachers reported repeated complaints about the difficult work with the students to the extent that the classes were disturbed" (A1).

"There are teachers who offer the students all what they could of homework, and perform their duties to the best satisfaction in terms of teaching, educating and dealing with the parents, showing care in them, and communicating with their parents to encourage them to attend the zoom classrooms" (A2).

"Teachers are the success of distance learning. I met two types of teachers: teachers who had good connection with students and parents and teachers who took advantage of the conditions of distance learning in a very good way. On the other hand, the second kind of teachers utilized the conditions negatively. Such as: irregular teaching, indifference about the students, attempts to avoid attending the classroom. In certain cases, you can not know where the teacher is during the classroom time. There were repeated complaints by the parents to the principal about irregularity of the educational process caused by the teacher. There are teachers who provide excuses, such as: lack of permanent internet, problem in the attendance link, absence of the students, or delay so that the students will not attend at the school" (A3).

Responses of the parents with the teachers during the Covid-19 period were quite sorrowful because there are many families that have large numbers of children at home. Therefore, the computers, and instruments were not found with them for all the students to distance learning. In addition, the poverty of the students creates obstacles in their access to internet and computers. All these obstacles had a negative effect on the education process, which the interviewees described as follows:

"There is a part of parents who entirely cooperate with the teachers, such as providing good conditions for the students, connection means, participation with the teacher and the educator, and connection with the school principal. Still, there is another part who try to avert responsibility based on causes such as: lack of connection means, connection with the teacher through the WhatsApp, leaving the WhatsApp group, complaints about the teaching times, such as non-awaking the students from the sleep to match the student program, and not urging their children to learn" (A1).

"There are many families that cannot provide connection appliances for all their children. The teachers used to have the students in front of them in the classrooms. Now, they cannot reach schools, and they have to be taught about the technologies, which they do not know basically. Furthermore, these instruments, such as the computers, were not found with them. There are many families that have large numbers of children at home, and they cannot provide a computer for every school-aged child" (A2).

"There was stress among teachers and parents about all the connection issues in the Zoom classes. There have been complaints from parents about some teachers and vice versa. Some parents complained to me about teachers being late to Zoom classes, as well as teachers complaining about parents not cooperating and interfering with their work" (A3).

The school principals emphasized that there are changes that took place among the children after their return to the school as a result of the pandemic. For instance: educational problems, violence problems, and social problems, which were described as follows:

"Communication problems emerged between the teacher and the student, because they are accustomed to a certain learning style. The student learns more when he is face to face with the teacher in the classroom. This situation created a gap between the reality and the virtual reality. Students experienced addiction on the electronic appliances, especially the younger students. For them, the learning system became of a secondary (not primary) importance. Computer is used with the pretence of learning, but facts reveal other things" (A1).

"Educational Problems: many students missed many academic courses, and some other subjects were not educationally covered. Socially, there were many behavioral problems and inability of the students to communicate one with the other. Violence problems: violence increased

among the students. Feeling of fear of the effects of Corona: there are students who at all did not return to school due to the pandemic" (A2).

"The students returned to the school with difficulty. They were accustomed to laziness, and it is quite difficult to return to the state they were in before the pandemic, which resulted in the low achievement of the students" (A3).

The school principals state that they benefited from the Corona period as a result of stress and the problems in the distance learning management during pandemic, as follows:

"I benefited from the Corona period in how to judge in many matters by managing them remotely, without physical contact with others. Upgrading the infrastructure of the school, as a computer was introduced to every classroom, and the students were trained on computerized tasks" (A1).

"Every experience has its advantages and disadvantages, positives and negatives. The face-to-face education is better and we could engage its free times with more benefits. Even, remote learning was used by us as an auxiliary method that helps us make meetings with the faculty. We gained an additional tool for education, which is communication with the teachers and parents of the students through the social media, such as an emergent meeting with the parents" (A2).

"Self-Learning: many students had self-reliance and self-responsibility concerning the education. They were self-dependents and independents in their decision-taking. Technological means: during the Corona period, many types of technological systems and social media appliances were used. Experience is gained in this area by both the teachers and students. As a result, an educational improvement was achieved, and caused a shift to the 21st century's communication revolution" (A3).

7. Discussions

The aim of the research is to examine the stress of the principals in Bedouin sector schools in Israel concerning remote teaching during COVID-19 pandemic, when the Israeli education system was stopped and switched to remote learning. School closures have far-reaching social and economic consequences affecting the general public of students, parents and teachers, especially students of low socioeconomic status (Dahan et al., 2020). Bedouin schools still lack physical and human resources (Weisblai, 2017).

School principals have faced unexpected challenges in the virtual teaching. Meanwhile, there were concerns about the ability of teachers, students, parents and school principals to deal with the situation at the same time (Upadyaya et al., 2021).

The basic principle central to the COR theory is that resource loss is more prominent than resource gain (Shelef et al., 2022). The loss of resources affected the school principals of the Bedouin sector, and they were required to deal with stressful situations at the individual and organizations levels. In this case, the loss of resources was larger than gaining resources. As a result, strains have emerged, such as uncertainty, lack of connection between the school community, and social and emotional

consequences during the COVID-19 pandemic, which were common in the education system in the Bedouin sector.

The first results that were revealed relate to the sudden turmoil and switch to distance learning, and also were related to high stress of the school principals. According to the findings, in an environment of chaos, unstable situation, they were not ready for teaching. In addition, there was lack of computers for the students and the teachers, which created more stress to the school principals and the community.

Similar findings in the literature regarding the latent profiles of school principals' stress were reported by Upadyaya et al (2021), who found that all these sudden turmoils emerged during COVID-19 in school community. The school principals were experiencing high or altered levels of stress. This finding also supports the study of Kavrayıcı & Kesim (2021), who provided that in times of uncertain crisis, school principals cannot continue the leadership practices that they are accustomed to. Excessive workload was the main cause of stress for principals (Denecker, 2019). In addition, the stress of the principals and teachers had a negative effect on the students and on learning in general (Moody & Barrett, 2009). School principals are key figures in the design of an organization that supports teachers and promotes student achievement. School principals deal with students, parents, teachers, and external situations in their daily work, indicating that they are multi-role performers and often under stress.

According to the findings, there was a lack of control of school principals with their teachers during the COVID-19 pandemic. They were unable to monitor teachers in the performance of their work in distance learning. This can be explained by the chaos and uncertainty at the beginning of the pandemic. There are two kinds of teachers, responsible teachers who worked hard with the school principal and with the students, showing care in them, and communicating with their parents to encourage them to attend the classrooms. On the other hand, the second kind of teachers utilized the conditions negatively, teachers who provide excuses. Teachers also faced difficulties such as parents' lack of cooperation, and experienced a lot of stress at work and distress during pandemic. According to Smyth and Dermody (2011), the level of teachers' satisfaction was associated with the level of stress of the school principal. High Levels of stress may lead to burnout, which in turn may bring emotional exhaustion, de-personalization, and lack of personal achievement feeling (Maslach, et al, 1996).

Similar findings by Karakose et al, (2022), showed that burnout syndrome is found to be more common among teachers due to prolonged stress caused by the changes brought about by the COVID-19 pandemic.

Principals and teachers had difficulty in dealing with students during distance learning due to lack of knowledge in the use of technological equipment. Additionally, classrooms were disrupted; they experienced inability to solve teachers and students' problems, and there was no control over students' behavior during classes, who negatively utilized this condition. These results show that teachers are unable to control the monitoring and tracking of students in distance learning.

The results of this study are similar to the results of the study of Kavrayıcı & Kesim (2021) that teachers are unable to monitor and track what students have in fact learned, and their students were unable to adapt to distance learning. In addition, this finding also supports the study of Byun and Slavin (2020), that adoption of distance learning may reduce the quality of education in general. It can be explained by that face-to-face education is better for the Bedouin schools community.

School principals and teachers, the two key players during the COVID-19 pandemic, were faced with a stress, workload increase and faced a different working environment.

Access to internet and use of the computer for the students in Bedouin sector and the socioeconomic status of most students in the Bedouin population are very low. There are many families that have large numbers of children at home. Therefore, the computers, and instruments were not found for all the students in distance learning, and poverty of the students creates obstacles in their access to internet. This inequality caused obstacles between students and teachers throughout the pandemic. Furthermore, all recognized Bedouin areas are included in the lowest socio-economic cluster (Tirosh, & Eyal, 2018). This is the poorest and most vulnerable population in Israel. According to Abu Ras (2011), the standard of living for the Bedouins is much lower than the average standard of living in Jewish communities, and even in most Arab communities in Israel.

Similar finding are in the study of Byun and Slavin (2020), which provided that education inequalities, because of family influences and financial instability, have disrupted optimal learning for students during the COVID-19 pandemic. Bedouin school principals were unsuccessful to reduce educational inequality when it comes to distance learning, which is seen as a major cause of stress at work.

The results of the current study revealed that a positive relationship exists between the addiction of the students on the electronic appliances and laziness, when they returned to the school. They were accustomed to laziness, and it is quite difficult to return to the state they were in before the pandemic, which resulted in the low achievement of the students. In addition, parents who are unable to control and follow their children provided the appropriate conditions for addiction to the electronic devices.

This finding corroborated the finding of Karakose et al, (2022), that social media use has increased with the spread of the COVID-19 pandemic. The findings revealed that social media addiction tended to increase during the COVID-19 pandemic period, and that a more comprehensive solution to this growing problem was needed.

According to another result of the current research, when addiction on the electronic appliances and laziness among students in the Bedouin population was found, they were socially and emotionally influenced. There were many behavioral problems and inability of the students to communicate one with the other; communication problems emerged between the teacher and the student; and violence increased among the students. School principals in Bedouin sector were in a process of

uncertainty during the pandemic to make sure of their well-being of learning community.

Similar finding in Kavrayıcı & Kesim (2021) that school principals are expected to work to ensure the emotional and social well-being of teachers and students despite the problems, such as social isolation they have experienced during the COVID-19 pandemic period. Another study provided that school leaders work to guarantee students' emotional, social and supportive well-being (Harris, 2020).

Regarding school principals' benefit from the COVID-19 period, the findings showed that face-to-face education is better than distance learning; remote learning was used by them as an auxiliary method.

8. Conclusions

During the COVID-19 Pandemic, school principals in the Bedouin sector experienced work stress and workload. The present study showed some important results during the COVID-19 Pandemic. Both school principals and teachers experienced high pressures at work, difficulties at work, lack of contact with some teachers and students and the community at large with lack of computers and lack of internet connection during the COVID-19 Pandemic. When students return to the school seats, principals and teachers were likely to feel changes in student behavior, laziness, media addiction, and low achievement of the students due to the plague and school closures. They must work to ensure the social and emotional well-being of both students and teachers. In addition, in order to reduce stress during and after the Covid-19 pandemic, school principals need professional development in the field of crisis stress management. School principals need to provide social support for teachers, which helps them reduce stress at work. This support enhances the healthy and caring relationship between the school principal and the teacher, and indirectly affects student achievement, organizational commitment, and job satisfaction, especially after the epidemic and reality of uncertainty.

When examining the stress of principals in the wake of the Pandemic, it was found that the most common problems were lack of computers for students and lack of internet connection during distance learning. The Pandemic has deepened inequality for students in the education system in the Bedouin sector and also for families' students with low economic status. Policy makers in the Ministry of Education should provide each family, which is defined in a low socioeconomic status, with a computer as well as a device that allows their students connect to the Internet, meet education needs, reduce inequality, and improve the effectiveness of student to combine between distance learning and hybrid learning after the pandemic.

Finally, school principals during the COVID-19 pandemic, had experience in the management of the school remotely, and experienced the challenges in the reality of the uncertainty of future learning for similar situations.

This study was conducted with a few school principals in the Bedouin sector. The received results are limited based on the number of participants. Quantitative studies can be conducted for schools in the Bedouin sector. Future research could examine how school principals in the Bedouin sector dealt with changes in student behavior after the COVID-19 Pandemic.

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