# INTERNAL AUDITING & RISK MANAGEMENT



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#### **INTERNAL AUDITING & RISK MANAGEMENT**

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#### CONTENTS

TRENDS IN CURRENT INTERNATIONAL MIGRATION Brînduşa Mihaela RADU	9
FINANCIAL STABILITY OF ECONOMIC AGENCIES IN CONDITION OF ECONOMIC CRISIS <i>Cătălin DUMITRESCU</i>	NS 22
COMPANY TAXATION AT NATIONAL AND EUROPEAN LEVEL Otilia MANTA	34
TERRITORIAL ADMINISTRATIVE UNIT - AUTONOMOUS ADMINISTRATIVE STRUCTURE <i>Emilia VASILE, Ion CROITORU</i>	57
THE CHANGING NATURE OF WORK. BRIEF AUDIT OF HUMAN CAPITAL IN ROMANIA <i>Radu GHEORGHE</i>	68

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#### TRENDS IN CURRENT INTERNATIONAL MIGRATION

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Abstract: Labor migration is the subject of many specialized studies that are the subject of interdisciplinary sciences such as economics, international affairs, European law, sociology and many others. Due to the evolution of the Romanian economy in recent years, it is important and necessary for any future economist to understand this topic as well as possible (Petrozziello, 2013). Looking ahead, it is necessary to know as much information as possible about the factors underlying the development of the country's economy, as well as about the factors that determine this migration of labor force at international level. If the main reason why at this moment the labor force chose to leave the country of origin and to migrate to the states with a developed economy is a better life, the aim is to provide children with a better future. Worldwide (Katseli et all, 2006), it is currently estimated that there are over 200 million migrants, even the International Day of the Migrant is established, in which this phenomenon has become normal, and in which, mainly, information on human rights is disseminated and to the freedoms of migrants. Nor is Romania outside this framework of international normality, only that the elements of distinction are generated by the reasons for emigration, which, as will be analysed, in a synthetic form, in the following case study, are confined to both economic factors. but, last but not least, the socio-political factors. The paper addresses the problems of international migration and the importance of the migration of the labor force at present on the economic development of a country.

**Keywords:** *labor force migration, development, migration theories* **JEL Classification:** *J1, J61, C33* 

#### 1. Introduction

The phenomenon of migration has always existed and has materialized since the first occurrences of mankind through invasions, transhumance, colonization and crusades, or in general, caused by the attraction of the richer regions over the poorer populations (Iancu, 2011).

Although in the last 10 years in some areas of the world, such as Europe, migration has experienced significant flows, the problem of international migration is a short-term concern for many countries of the world, and is rather a response to some evolutions than to managing or estimating the movement of people. For the European space, the movement of people and of the labor force is of great importance, the enlargement of the EU in successive waves, the demographic aging of the population of (Western)-European countries at an accelerated pace and the economic reasons are the main factors in increasing the movement of the respective people of the labor force (Burian, 2009). Nowadays the demographic preoccupation reappears due to the risks that it arises in the manifestation of crises at local, zonal, continental or planetary level that influence the social order, or in the triggering of disturbances of the ethnic or religious balances.

#### 2. Analysis of theories regarding migration

At present, the phenomenon of international migration is extremely complex, and cannot be included in a single theoretical pattern (Massey, et all, 2012). Due to the free movement within the intra-Community territory, the control of the increasing flow of migrants became very difficult, and in this context, the knowledge of the number and typologies of migrants became a permanent concern of the academic world, the factors of influence, the conditions of unfolding, the reasons for returning to the country. origin or dispersion, constituting subjects of interest for scientific research.

Looking back in time, we find that Ernst Georg Ravenstein, considered the father of migration theories, concluded for the first time that migration was generated by the push-pull process, with the unfavorable conditions of country of origin. Reasons such as low wages, high taxes, repeated abuses of public authorities, legislative instability, unfavourable health climate, unconventional social environment, monopoly trade, or poorly developed transport infrastructure continue to produce migration currents, and at present, because favourable conditions prevail. I attract people from one country to another. The issue of migration has known over time, various theoretical approaches, whose synthetic presentation we highlight in table 1 (Albu, 2007; Petrozziello, 2013; Katseli, 2006; Massey, et all, 2012) below:

The classical theories	Commercialism	Barbon 1690	emigration to the colonies	
	Classical school	Smith 1785	displacement of population and capital by abolishing barriers between states	
	Marxism	Marx 1867	the needs of displacement and development of the population characterize migration	
Push-pull model	Migration laws	Ravenstein 1885	migration was influenced by the push-pull process	
	The law of opportunities	Stouffer 1940	a migrant is established in a certain place determined by factors of the conjuncture but in any place can be found factors of positive, negative and neutra influence for the migration decision	
Contemporary theories	Neoclassical economic theory	Sjaastad 1962	the relationship between migration and investment in human capital	
	The theory of the world system	Wallerstein 1974	migrants from poor countries move to rich countries	
	Genealogical theory	Harbison 1981	migration is a family decision	
	Neoeconomic theory	Stark 1993	migration is a family strategy	
	Network theory	Massey 1990	the development of networks	
		Gurak 1992	determines the formation of the	
		Massey 1998	social capital of migration	
	Institutional	Massey 1998	migration has led to the establishment and/or	
	Institutional theory	Jennissen 2004	development of international companies, institutions and voluntary organizations	

Table 1. Ev	olutionary	presentation	of the	main	theories	of migration
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*Source: by the author* 

As can be seen, synthetically, from the presentation of the theories on migration carried out in table 1, scientists are looking for theoretical answers, describing the reality of migration, but modern theories are in fact a combination of classical and neoclassical theories. Therefore, we are living in a period in which the necessity of finding new perspectives of migration theories is becoming increasingly pronounced.

Of the contemporary theories of migration, the neoeconomic one states that migration is a family strategy, the family occupying an important place in the value system regarding the quality of life of the individual, the resources being obtained by sending a person/s from within the family to work. Because the decision is made within the family, according to this theory, the individual is no longer the only one to decide, and his family is the one that conditions the behaviour of the migration (Stark, 1993; Iancu, 2011).

Network theory examines migrant networks as a form of social capital (Massey, 1990), which is formed through the expansion of networks. This theory (Gurak, 1992) argues that migrants have created support networks by providing newcomers with support, information, emotional and social support, finding a job and earning a decent income. The networks of migrants are dynamic and one of the main themes of the researchers in the field of migration, because migration is closely related to family, friendship or neighbourhood relations, the migrants choosing their place of destination depending on the presence of relatives, friends or neighbours present at place of destination. The first writing about migrant networks as a form of social capital (Massey, 1990), shows that it was first formed in 1987.

Migration is a human phenomenon that constantly characterizes the evolution of humanity, the migratory movements being in an increasing trend and with a very diversified spatial footprint, the maximum level being reached after the Second World War, with the development of the systems of distance transport. According to the World Bank, between 1950 and 2015, the world's population tripled, rising from about 2.5 billion in 1950 to over 7.7 billion in 2015 (European Commission). In parallel with the population growth process, the process of migration of people across the globe, the rapid means of transport favoring the territorial travels to distant distances. In the contemporary context, international migration takes place on the following routes: Africa - Europe, Asia - Europe, South America - North America and Europe, Mexico - US In this context, the factors that determine the cumulative character of international migration (Massey, 1998), and which are found, for example, are also highlighted.

- in the starting space (distribution of household income at community level, land distribution and the way of organization of agriculture, migration culture, regional distribution of human capital),
- in the destination area (social equity),
- but also, in both areas (migrant networks and institutions).

In the international media, we find explanations regarding the phenomenon of external migration, mainly oriented to the necessity of carrying out an economic activity, more than the desire to change the natural environment or the domicile (Albu, 2007). From this perspective, the European Union promotes circular migration through the EURES agreements, which is a "network of cooperation between European public employment services, created to facilitate the free movement of workers within the European Area and Switzerland". Currently, in the space of the European Union, Romanians have legal status of free movement and residence.

#### 3. The link between migration and development

The contemporary era can certainly be called an era of migration. In recent years, international migration has been unprecedented. Globally, it reaches over 232 million people or 3% of the world's population, and 740 million people are considered internal migrants (Petrozziello, 2013). The migratory phenomenon is characteristic, practically, of any state. Migration has become a defining feature of the modern global economy, and the main factors underlying its expansion are the processes of globalization, technical progress, the new economic order, etc. The importance of contemporary migration is linked not only to the number of those who migrate, but also to the fact that the migration phenomenon has become a global one and takes on increasingly diverse forms. People travel for varying periods of time, but shorter. They adopt a pattern of circulatory migration, continue to maintain strong links with the place where they left or practice unregulated migration. Women are increasingly present in migration of migration occurs).

Many families adapt to a transnational life, and the effects of migration are becoming more and more important. Globally, the amounts sent to the countries of origin reached values that were hard to imagine in the past. However, with their return home, migrants bring not only money, but also new ideas of development, knowledge and new entrepreneurial skills acquired through migration. In this way, the migrants clearly contribute to the modernization of the country and play an extremely important role in its intellectual and economic development. Since the early 1970s, the governments of some countries have seen international migration as a major instrument of economic development. Migration is no longer a phenomenon that affects only those who leave, but equally, those who remain in the country of origin, and those in the country of destination. Due to migration, entire areas transform and change their ethnic and cultural identity. Thus, contemporary migration has become one of the fundamental elements of social and economic transformation in the contemporary world (Iancu, 2011).

However, migration can also cause negative effects, such as the "brain drain", the decline and aging of the population, the deterioration of social security systems, leaving home without care for children and the elderly, trafficking in human beings, etc. Therefore, migration is neither good nor bad, and the aim of migration policies should be to increase the positive effects and mitigate the negative ones of migration. In other words, one of the current tasks of public authorities in the field of migration management would be to integrate migration processes into development strategies. However, despite the increased importance given to the relationship between migration and development, at present, national migration policies have not yet succeeded in fully exploiting its benefits, as they have not been integrated into development strategies.

Empirical research shows that migration can be an important factor in development for both migrants and their households. One of the most popular theories (the neoclassical one) demonstrates this connection, according to which, the differences of development stimulate the migration, which, in turn, contributes to a relative levelling of the rate of development between the countries of origin and those of destination. For this reason, the development impact of migration, at aggregate, community or national level, tends to be more tangible for the country of origin than for the country of destination (Petrozziello, 2013).

Analysing the evolution of the relationship between migration and development, de Haas proposes a periodization of the interpretation of the migration-development relationship. If in the 1960s it was believed that migration contributes to development through the transfer of resources from the country of destination to the one of origin (financial remittances, knowledge), thus "modernizing" the regions of origin of migrants, in the 1970s (after the oil shock of 1973) she was accused of fuelling the global gaps, by transferring cheap Labor to the developed regions, as well as from the "brain drain", and during the 1980s and 1990s empirical research showed that migration is not influenced only by the factors economic, but also social ones related to the way of life.

In 2006, the United Nations (UN) debates in general the connection between migration and development and decides to initiate annual meetings on this topic (Global Forum or Migration and Development) (Petrozziello, 2013; European Commission). Generally, when the citizens of a state actively decide to migrate, their incomes tend to increase, and the opportunities also manifest themselves in other ways (gaining new skills, assuming new social roles and responsibilities by migrant women). Moreover, the free and independent decision to migrate can also be considered the application of a fundamental human right - the right to free movement. The right to free movement can be a real opportunity to extend freedoms and, consequently, to increase the level of human development. Although not all the impact of migration is positive (for example, many migrants may have problems of integration in a new social environment or increasingly the problem of children of migrants left home without care), as a rule, "voluntary" migration is beneficial for the development of the migrant both economically and socially.

Returning migrants to the households they maintain relationships with, systematic transfers tend to improve their lives and increase the quality of life and migrants, and their family members. These transfers can result in higher incomes for households, more resources for expenses related to health, education, housing, etc (European Commission). They can offer households and other types of benefits such as new ideas and knowledge. These transfers are also important from the human rights point of view, as they can provide the financial and non-financial resources necessary for the realization of fundamental rights (access to education, healthcare, etc.).

Although most "transfers" by migrants to their countries of origin are predominantly private, targeting individuals and households, they have broader implications (CDEP, 2020). For example, remittances sent by a migrant may allow the family to invest in a new home, thus stimulating employment in the construction sector in that locality. Also, a person who returns to the country after studying abroad brings with them competences that will benefit the community as a whole. Thus, international migration generates three types of transfers, each influencing development in different ways. The three types of transfers are also called the 3Ts (Iancu, 2011). The first is the transfer of people the migration itself (T1). This includes immigration, emigration and return. The second type is the transfer of know-how and knowledge (T2).

As they move, people take with them ideas and knowledge, forming new skills and ideas while abroad. This "knowledge capital" can circulate between the countries of origin of the migrants and the countries of destination through social networks. The third type is the transfer of financial assets (T3), which can take various forms: salaries, savings, remittances, as well as investments. Transfers of type 2 and 3 may also come from those who are not migrants themselves, but members of the diaspora. The effects of 3T can be both positive and negative. Thus, in the case of T1 transfers, employment abroad can reduce unemployment in the country of origin, while also contributing to cover a

possible shortage of labor force in the country of destination. At the same time, this transfer leads to the disintegration of the family in the country of origin or it can generate various conflicts of ethnic or national character, as well as pressures on the social protection system and on the infrastructure of the countries of destination, due to the increase of the population number. In the case of T2 transfers, migrants may transmit certain attitudes and values to households and communities in the country of origin. And these can be positive (in case of cultivation of new traditions focused on health protection or investment in education) or negative (when these transfers generate a flow of human capital from the country of origin). In the case of T3 transfers, the members of the families of the migrants can significantly improve their standard of living. At the same time, the inflow of remittances can stimulate inflation and increase the inequalities between households that receive remittances and those that do not.

Transfers generated by international migration can also be interpreted through the notion of capital. Thus, the resources and benefits with which international migration contributes to development are embodied in human capital, financial capital, social capital and cultural capital.

The financial capital is manifested through the remittances of migrant workers from abroad. In the last decade, this type of capital has been given more attention both by the authorities of the countries of origin and by the international bodies promoting the idea of integrating migration into the development strategies of the countries of origin due to the enormous volume of remittances received by the country. developing countries (\$580 billion in 2014). Remittances are private funds or in-kind transfers made by migrants to nonmigrant relatives. In addition to the cost, speed, accessibility and security of the transfer services, the mode of sending the remittances is also influenced by the level of information and financial culture of the senders and the recipients.

Remittances are an additional source of income for households and increase the standard of living. Because remittances stimulate consumption, they can have a multiplier effect in local economies. At the same time, remittances produce dependency relationships for members of the families of migrant workers, inequalities between the incomes of migrant families and families without migrants. Human capital is manifested by the professional skills and knowledge that migrants have gained by working abroad. In the same context, entrepreneurial skills or self-confidence, qualities very necessary for personal development in a competitive economy, can be mentioned. But international migration can also have the opposite effect. In the situation where the migrants obtained the qualifications in the country of origin, but they went abroad, because at home they could not be realized, there is a loss of human capital through the phenomenon of "brain drain" (Iancu, 2011).

The loss of capital also manifests itself in the situation where a highly qualified person going abroad performs unqualified work, taking into account the phenomenon of "brain waste". However, it is generally acknowledged that the benefits of knowledge tend to be divided between the countries of origin and destination. Thus, skilled migrants, using their skills, will receive higher wages abroad which will turn into remittances. Working abroad, skilled migrants have the opportunity to acquire new skills and knowledge that they can use at home. In other words, there is a transfer of intelligence, a phenomenon that is called "brain gain" (Iancu, 2011).

**The social capital** is manifested in the social links between the localities of the countries of origin and those of destination that the migrants form and maintain. Namely, social capital allows the creation of networks that facilitate the flow of information, skills, financial resources, values, ideas, etc. between the countries of origin and the countries of destination.

Social capital connects migrants with diaspora associations, contributes to the creation of professional and business networks, etc. Many believe that these links may become weaker as migrants integrate into the social environments in which they have settled. On the contrary, migrants tend to maintain these links by engaging in various development actions (investments in social capital), seeing in them a potential benefit in the future.

The cultural capital that manifests itself through the new values, ideas, behaviours, lifestyles that the migrants cultivate coming to the country of destination. Thus, the quality of life of migrants will increase markedly by acquiring these new values and behaviours (for example, democracy, equity, etc.). The transfer of cultural capital can take place through the contribution of migrants to peace-building and conflict resolution in the countries of origin. The contributions of migrants depend on the extent to which they realize their rights and capabilities as a result of migration. As such, migration is a form of manifestation of the freedom of people who must make the most of it. At the same time, migration can also lead to a decline in well-being if the decision to migrate was made by force (for example, in the case of trafficking in human beings).

#### 4. Migration policies of the European Union

The development and promotion of migration policies within the European Union began in the 1950s, when the foundations of the European Union were laid. The agreements concluded at that time between the countries of the European community were aimed at regulating the migration processes by harmonizing the policies in the field between countries (Albu, 2007). At the same time, the Member States of the European Union were not yet ready to give up entirely the national approaches to migration policies and to promote a common migration policy (Burian, 2009). From that moment on, the migratory processes have undergone several radical structural and qualitative transformations, now becoming a kind of "pendulatory movement", due to the continuous development of transport and the means of communication. Since the first years of the 21st century, within the European Union, there has been a need to reformulate migration policies in accordance with the new demographic and economic conditions.

The current content of the EU's migration policy in accordance with the provisions of the GAMM pillars is as follows (Burian, 2009):

#### a) Legal labor migration

This pillar focuses on improving current legislation and administrative practices in order to increase labor mobility within the European Union. Particular attention is drawn to increasing the level of employment in correlation with ensuring social protection, gender equality and social inclusion. The integration of legal immigrants is a priority of the European Union and implies their access to education and vocational training. The policy of the European Union for the management of labor migration aims to produce flexible admission systems, adaptable to the needs of the Member States of the European Union, which will allow migrants to fully exploit their skills. In this context, the following tools are applied:

- Directive on the "Blue Book" (Council Directive 2009/50 / EC of May 25, 2009, on the conditions of entry and residence of third-country nationals for employment of highly qualified jobs);
- "Single Permit Directive" (Directive 2011/98 / EU of the European Parliament and of the Council of December 13, 2011, concerning a single procedure for applying for a single permit for third-country nationals for the purpose of residence and employment in the territory Member States and a common set of rights for third-country workers legally staying in the territory of a Member State);

#### b) Illegal migration

The European Union is analysing this subject in the light of specific measures for employers who accept undeclared workers, as well as by raising funds for an efficient and humane return policy for migrants, in accordance with the provisions of the "Charter of Fundamental Rights of the European Union" adopted in 2012. Most of the illegal migrants have entered the European Union legally, on the basis of a short-term visa, but for economic reasons they were also withheld after the expiry of the validity period of the residence visa.

Another issue related to illegal migration is trafficking in human beings. In this context, in 2010 the European Commission appointed a European Union Coordinator for anti-trafficking in human beings and launched a website on anti-trafficking measures taken by the European Union to improve the collaboration and coherence between the actions of the institutions, the agencies of the Union. European, non-EU member countries and international actors involved in combating trafficking in human beings (INSSE, 2017).

#### 5. The evolution of migration in Europe

According to statistics compiled by the World Bank, the population of Europe has grown, from 667 million people (European Commission, 2019). in 1960, to 911 million people, at the beginning of 2017. On January 1, 2018, the population of the European Union (EU) was estimated at 512.6 million, compared to 511.5 million on January 1, 2017, according to data published by Eurostat. In 2017, almost 50% of Europe's total population is concentrated in five countries: Germany (82.8 million inhabitants), France (67 million inhabitants), Great Britain (62.8 million inhabitants), Italy (60.5 million and Spain (46.5 million inhabitants) (European Commission, 2019).

With regard to the migrant population, Eurostat shows that on January 1, 2016, the total number of migrants was highest in Germany (7.2 million), Spain (5.7 million), England (4.2 million), Italy (3.9 million) and France (3.7 million). In 2010, the ranking did not undergo major changes, most migrants living in the EU were in Germany (7.2 million), Spain (5.6 million), Italy (4.6 million), England (4, 5 million) and France (3.8 million). Together, foreign nationals from these five Member States represented 77.3% of the migrants living in the EU-27. The large number of immigrants from these countries is also preserved in 2018, due to the living conditions and job opportunities offered by these countries. The emigration to the countries of Western Europe for economic reasons, has registered spectacular increases since 1990, mainly due to the fall of the communist regime (Burian, 2009)

It is estimated that only Eastern and Central Europe generate about 850,000 people annually. In the last two decades, Germany, the United Kingdom, France, Italy and Spain have faced a large number of migrants, coming from underdeveloped or developing countries, so it is noticeable that at present, Western European countries are destination countries for immigrants, even if in the past centuries they were sources of emigration (European Commission, 2019).

The same feature is also found in the North European countries (Finland, Sweden, Ireland and England); but alongside the Central European countries (Denmark, Germany, Belgium, Austria, Luxembourg, the Netherlands and France), and the Mediterranean countries (Italy, Spain, Portugal and Greece) which are the central core of migration in Europe; these economically developed countries have experienced the transition from migrant supplying countries to receiving countries.

#### 6. Conclusions

In the following decades, international migration remains a real process and can vary, taking into account political and economic changes, technological and social innovative changes, increasing demographic imbalance, the effects of climate change and globalization trends.

In order to increase the positive effects and to minimize the negative effects in the field of labor migration, the following aspects can be identified: stimulating the return migration and the circular labor migration; creating favorable conditions for returning migrant businesses and developing SMEs in regions; adapting national educational policies to the needs of the labor market; the more active and effective involvement of the diaspora in development policies.

#### References

- Albu, A. (2007). *International Labor Migration*. Bucharest: Scientific and Enciclopedic Publishing.
- Burian, C. (2009). The Phenomenon of Migration in Europe: Legal and Economic Perspectives. *Moldovian Journal of International Law and International Relations*, Nr. 4 pp. 84-93.
- CDEP (Chamber of Deputies of Romania). (2020). *Legislative Council* [online]. Available at: http://www.cdep.ro/pls/legis/.
- European Commission. (2019). *Eurostat Statistics* [online]. Available at: http://ec.europa.eu/eurostat/statistics.

- GD no. 568 / September 21 (1992) regarding the approval of the Agreement between the Government of Romania and the International Organization for Migration regarding the legal status, privileges and immunities of this organization in Romania.
- Gurak, S. (1992). Migration networks and the shaping of migration systems, [online]. Available at: www.researchgate.net/publication.
- Iancu, N. (2011). International Labor Force Migration: Theoretical Considerations and Economic Benchmarks of the Migration Phenomenon.
- Katseli, L.T., Lucas, R.E.B., Xenogiani. (2006). *The What Do We Know*. Paris: OECD Development Center, Working Paper No. 250.
- Law No.123 of June 19 (1998) on the acceptance by Romania of the Constitution of the International Organization for Migration.
- Massey, D. (1990). The Social and Economic Origins of Immigration. *Annals of the American Academy of Political and Social Science*, 510, pp. 60-72. https://journals.sagepub.com.
- Massey, D. (1998). International Migration at the Dawn of the Twenty-First Century: The Role of the State. *Population and Development Review*, 25(2), pp. 303-322.
- Massey, D., Arango, J., Hugo, G. Kouaouci, A., Pellegrino, A., and Taylo J.E. (2012). Worlds in Motion: Understanding International Migration at the End of the Millennium. Oxford: Oxford University Press.
- National Institute of Statistics, Romania (INSSE) (2017). *Population* [online]. Available at: http://www.insse.ro/cms/sites/default/files/com\_presa/com\_pdf/ poprez\_ian2017r.pdf.
- Petrozziello, A. J. (2013). *Gender on the Move: Working on the Migration-Development Nexus from a Gender Perspective*. Manual training. Santo Domingo, Dominican Republic.
- Stark, O. (1993). *Theories of International Migration: A Review and Appraisal*. Cambridge: Cambridge University Press.
- World Bank. (2019). Migration and Remittances. Washington, DC: World Bank Group, [online]. Available at: https://www.worldbank.org/en/topic/labormarkets/brief/ migration-and-remittances.

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#### FINANCIAL STABILITY OF ECONOMIC AGENCIES IN CONDITIONS OF ECONOMIC CRISIS

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**Abstract:** The purpose and objectives of the research reside in the theoreticalpractical and methodological analysis of financial stability at micro and macroeconomic level under the conditions of cyclical economic fluctuations, elucidation of the factors contributing to financial stability and formulation of relevant proposals regarding the improvement and efficiency of policies and strategies for strengthening the financial stability of the agents. economic and national economies. The main purpose is to develop the theoretical and methodological foundations for evaluating (measuring) the financial stability at the macroeconomic level and the aggregate economic agents and analyzing the risks that result from the transmission of financial instability through the inter-systemic interconnections from the perspective of the financial flow model, its correlation with the cyclical fluctuations of national economies, researching the recovery practices of national economies and, as a result, formulating recommendations on inducing and strengthening financial stability.

**Keywords**: financial stability, financial instability, economic crisis, financial crisis, interconnections, indicators financial stability, econometric models of financial stability, consolidating factors of financial stability **JEL Classification**: C23, C26, C38, C55, C81, C87

### The defining elements of economic agents and markets interconnected with financial stability

Professor Gregory Mankiw of Harvard University in his book "Principles of Economics" says that like any other science, economics perception and learning involve the use of models (Mankiw and Gregory, 2008).

Except that unlike the plastic models of the human body used by anatomy teachers, the economic models are composed of diagrams and equations. But all the models omit some details and normally no one would confuse a model with a real person or with the real economy. The economy is made up of millions of people involved in multiple activities of purchase, sale, work, production, consumption, innovation and so on (Mankiw and Gregory, 2008).

The term "economic agent" in its broadest sense is used in economic literature synonymous with the term "economic subject", having the meaning of participant in the economic life. Economic agents are economic subjects involved in the production, distribution, exchange and consumption of economic goods. In the most generalized way known, the market economy consists of economic agents and markets. The model of the economic circuit, or the model of the circular flow of income (the circular flow model or circular flow) presents the economy as a system composed of several elements and visualizes, in a simplified way, the value interdependencies between the main subsystems (economic agents and markets) (Albacete and Lindner, 2013).

The essence of the economic flow is based on the image of a closed circuit in which the inputs are equal to the outputs. The modification of the stocks is analyzed during the economic period analyzed. The idea of circular flow was first introduced in Richard Cantillon's work. François Quesnay developed the concept, presenting it in the "Economic Picture". Karl Marx and John Maynard Keynes have made important additions to this model (Bernanke, Boivin and Eliasz, 2005).

Richard Stone, Keynes's assistant, has further developed the concept for the United Nations (UN) and the Organization for Economic Cooperation and Development and has developed the system that is being used internationally to date. Unlike the entire spectrum of economic activities, starting from production, distribution, exchange and consumption, the circular model refers to bilateral transactions, which are marked by flows in the opposite direction. Two types of flows correspond to each bilateral transaction:

- real flows of goods and services.
- cash flows come in the opposite direction.

In economic science it is considered that the economic agent represents an actor and a decision maker within an analyzed model, which as a rule represents a simulation of the real economic activities. From the microeconomic point of view, the economic agents are analyzed first and foremost in their position as decision makers, in the full sense of this word as persons holding the power of decision. Respectively, each economic agent makes decisions to solve the problems of choice and optimization, defined well or insufficiently, under conditions of full information, insufficient or even lack of necessary information. The essential distinguishing feature of economic agents is the adoption and implementation of their own decisions in the sphere of economic activity (Apostolik, Donohue and Went, 2009).

Economic agents can be regarded as elementary economic agents and aggregate economic agents. Economic agents with similar behavior, functions and motivations, originating from resources of the same type, form an institutional sector. The aggregation of the economic agents can be done according to the branch of activity, the form of organization, the economic functions fulfilled or the institutional criterion.

#### Theorizations on the concept of financial stability

Even though for the keywords "financial stability" Google proposes over 23 million sources in English, over 1.2 million sources in Russian, and over 250 thousand sources in Romanian, so far, we do not have a broad definition accepted financial stability.

The first uses of the concept of financial stability are attested in 1992 in the works of Hyman Minsky and in 1994 when the Bank of England added financial stability to its objectives. In the next decade the objective of financial stability was assumed by most of the central banks of the states of the world. Defining a concept, which is also the subject of a public policy, is a topic of great importance, as the correctness and precision of the definition of the "object" of any policy influences its success.

It is certain that the concept of financial stability is related to interaction and, as a rule, to subordination to the concept of economic stability, and economic stability is defined in relation to the trend of economic growth.

Subordination emerges from the primary role (functions) that the financial system plays in the economic systems:

- channeling surplus funds from creditors (companies or individuals who want to invest their money) to borrowers (respectively those who need capital), directly.
- financial intermediation, provided by financial intermediaries (such as banks and insurance companies), which indirectly bring together creditors and debtors (although borrowers can obtain funds and directly from financial markets by issuing securities, such as shares or bonds.
- offering the financial infrastructure, which allows the transfer of payments, as well as the trading, clearing and settlement of securities.

• risk allocation and management (Allen, Rosenberg, Keller, Setser, and Nouriel, 2002).

The financial system has a complex structure. In the generalized approach it is composed of the following elements: financial markets, financial institutions (intermediaries), financial infrastructure, which allows the transfer of payments, as well as trading, clearing and settlement of securities, but also includes the financial law system (Dell' Arriccia, Igan, Laeven and Tong, 2012). Therefore, financial stability encompasses and refers to all components of the financial system. And the disruption of any of these elements endangers financial stability in general.

As the recent financial crisis has shown, financial stability plays a vital role in terms of the financial system and the economy. In the 1980s, direct regulation of credit markets and capital flows was eliminated in many countries, which facilitated the expansion of the financial system at a more rapid pace than other sectors of the economy. Financial instruments have become more complex, the activities of financial institutions increasingly diversified, and the risks more variable. Also, due to the high degree of trans-industrial and cross-border integration, the interrelation of financial systems has increased both nationally and internationally (Dell'Arriccia, Igan, Laeven and Tong, 2012).

In addition, due to the increasing globalization phenomenon, in recent years fears of contamination of national financial systems as a result of the onset of crises in other systems are becoming more acute. The response of the international community to these problems has resulted in the creation of consultation forums, bringing together representatives of market actors and supervisory authorities, which aim on the one hand to create recommendations on regulatory improvement, which will include best practices for identification, measurement. and risk management, and on the other hand to ensure the transposition and implementation of these regulations in different jurisdictions. Financial stability has become an increasingly important objective of the economic decision-making process in recent decades. In the specialty literature and modern practice there are two approaches to defining the concept of financial stability:

- I. Financial stability is defined as the absence of financial instability, thus representing the opposite phenomenon.
- II. Financial stability is defined specifically, without resorting to the concept of "financial instability" (Bernanke, and Mihov, 1998; Burns and Mitchell, 1946).

# Contributions to improving the methodology for assessing the financial stability of economic agents

Knowing the history of economic development and the continued existence of cyclical fluctuations, we believe that even in times of economic growth and macroeconomic stability, special attention should be directed to identifying and anticipating potential sources that could affect financial stability. Practitioner economists and researchers have made extensive efforts to find ways to measure financial stability, to predict the behavior of stability risk factors financial and finding ways to prevent crises, and the dissemination of the results of their research and actions helped to raise awareness of the importance of the problem.

Following the institutional support of the IMF and the World Bank in 1999, the "Financial System Assessment Program" (PESF) was launched, in English The Financial Sector Assessment Program (FSAP). The PESF assessments represent the joint responsibility of the IMF and the World Bank for developing and emerging countries and only the IMF in advanced economies and include two major components:

- assessment of the financial stability of the developed states, which is the responsibility of the IMF,
- evaluation of financial development in developing and emerging countries, which is the responsibility of the World Bank (Brave and Butters, 2011).

To date, more than three quarters of the member countries of these organizations have been subject to evaluation. The purpose of PESF evaluations is twofold:

- ➤ to evaluate the stability of the financial sector.
- to evaluate the possible contribution of the financial sector to the growth and development of the economy.

In order to evaluate the stability of the financial sector, the PESF teams: examines the stability and resilience of the banking sector and other financial sectors:

- performs stress tests and analyzes the links between financial institutions, including at cross-border level.
- evaluates the correspondence of the activity of banks, insurance companies, and the supervision of the financial market with the accepted international standards.
- assesses supervisory capacity, policy makers, and financial security nets to respond effectively in case of systemic stress (Burgin, 2005).

We point out that the ESFS assesses "systemic stability", not the health status of individual financial institutions (Goodhart, Aspachs, Segoviano, Tsomocos and Zicchino, 2004) and cannot predict or prevent financial crises, but only identifies the main vulnerabilities that could trigger them. The objective of the ESFS is to identify the potential vulnerabilities of the financial sector, whether they are of internal or external origin, and to help national authorities to develop and apply those remedial measures that are required (Burgin, 2005).

The program focuses more on preventing and mitigating crises than on solving them, aiming at identifying the ways of development of the financial sector of the participating countries and strengthening the architecture of the international financial system.

## Configuring the financial stability methodology through the anticipation of financial crises

In the analytical practice, a wide range of econometric instruments and models are used to evaluate the stability of the financial system (at the aggregate level). These include the analysis of quantitative indicators on the soundness and stability of the financial system, including stress tests. These models try to address the issue of financial stability as a systemic phenomenon and, therefore, refer not only to financial institutions and markets, but also to the real sector and government, as major debtors of financial institutions, as well as to infrastructure financial.

There are several criteria for classifying the econometric models for assessing the stability of the financial system, but they contain as a rule tests for anticipating financial instability situations, which can generate or can turn into financial or economic crises. In general, financial stability tests focus on the broad implications of macroeconomic shocks. Therefore, individual risks are rarely analyzed, the purpose of a systemic resistance test being to identify common vulnerabilities. In order to forecast all kinds of crises: banking, financial and currency, the Early Warning System (EWS) is used, which represents a set of processes, processes, models, indicators, etc., which synthesize the necessary information and data. to identify the risky financial institutions and the risks that the respective institutions face, their clients, other institutions and, in general, the financial system, allowing to predict the occurrence of a crisis in a certain time period in the future (Moinescu, 2007).

Most studies use EWS to analyze systemic vulnerabilities and, therefore, to verify the possibility of a crisis. An example of EWS used in practice is the one developed by NBR specialists, known as "CAAMPL Banking and Early

Warning System". It can be classified as T. Lutton early warning systems used by regulators and supervisors to identify banks at risk (Regulatory EWS) (Lutton, 2006).

Other quantitative methods are also known, which are used for financial stability analysis and evaluation, such as: discriminant analysis and multiple discriminant analysis. The conclusion that emerges from the presentation of the problems raised by the analysis and evaluation of financial stability is that there is not a single method that can be used for this purpose, but several complementary methods. Early warning systems (EWS) allow for predicting the likelihood of a financial crisis, but do not provide the possibility to include in the calculations all the risks to which the system is exposed nor provide information related to the ability to respond to shocks.

Stress testing techniques identify potential shocks and estimate the strength of the financial system, estimate potential losses that the financial sector would suffer in the event of a shock, but do not provide the opportunity to compare the level of stability over time or the level of stability of two or more many financial systems. However, periodic stress test results, especially in the banking sector, may also serve as an additional indicator of financial soundness.

Because the analysis and evaluation of financial stability involves the identification of a large number of risk factors, and they have a complex action, it is not possible to build a unique model that reflects all the factors. As the definition of financial stability has reached a consensus, at least relative, the fact that it allows the construction of aggregate indicators of stability, the majority being still in the research and experimental stage. The list of 39 individual indicators of financial stability, developed by the IMF in 2003, in order to monitor the level of financial stability of the economy, did not in fact allow the forecasting of the financial crisis of 2008 2009. Among the causes is the multidirectional movement of several indicators significantly complicate the possibility of a reliable assessment of the level and nature of changes in the financial stability of the economy. This fact was made aware even before the crisis of 2008, several central bank publications pointing out that they were trying to build a single indicator to show the level of stability of the financial system in the country concerned. This is a daunting task, given the complex nature of the financial system and the existence of numerous links between financial market participants, non-financial sectors and financial institutions.

Many of the tests focus on building an aggregate indicator for the banking sector, which is the most important component of the financial system in terms of financial stability. However, all the tests so far can be regarded as preliminary tests of alternative approaches for building such an indicator, but to date, no international consensus has been reached regarding the model of a standard index of financial stability, such as this is the case for the IMF's PESF or ISF. A relatively simple aggregate indicator of the stability of the banking sector built as a weighted average of the partial indicators of banks' financial soundness has been used, for example, by the central bank in Turkey since 2006 (CBRT 2006). The financial stability index is made up of six sub-indices that cover asset quality, liquidity, currency risk, interest rate risk, profitability and capital adequacy.

In Dattels' study, the map of the dynamics of global financial stability, introduced by the IMF in April 2007 and published twice a year, is analyzed. The purpose of the paper was to estimate the conditions and risks with impact on financial stability. A graphical representation of the map represents an octahedron with segments joining the center with tips and covered with a mesh. Throughout each segment is placed the point value of an indicator (estimated based on historical dynamics), which is aggregated from factors related to it. In order to interpret the map obtained, it is necessary to analyze the changes of each indicator. The authors concluded that this map cannot be reduced to a single index (Dattels, McCaughrin, Miyajima and Puig, 2004).

A great contribution to the research of financial stability in Romania was made by Claudiu Albulescu (2010), who in two published works determines the financial stability indices at the level of Romania and for the euro area. Research has confirmed that cooperation mechanisms in the area of financial stability at EMU level have not been effective. During the period under analysis, it was proved that the most significant impact on financial stability had economic growth and interest rate.

In a study by Brave and Butters (2011), they proposed a method for building the "integrated index of financial conditions", in English Financial Condition Index, composed of 100 financial variables with different periodicity, which is based on the analysis of the main components of the financial sector. The conventionally used indicators are divided into 3 categories: 1) the money markets; 2) the capital and financial markets; 3) the banking system. The calculations covered the period 1973 to 2009 for the USA and the paper presents a comparative analysis between the variation of the index and the prominent historical events that could have influenced this evolution and the forecast for the coming year. The researchers have proposed to develop this index.

A major resonance was the work "Financial Stress, Downturns, and Recoveries" by Roberto Cardarelli, Selim Elekdag and Subir Lall, published under the auspices of the IMF in 2009, which built an index of financial stress on the banking, capital and foreign exchange markets. have determined for 17 developed economies, in the last 30 years identifying 113 episodes of financial stress. With the help of the financial stress index (FSI), the paper proposes an analytical framework to evaluate the impact of financial stress, especially its consequences on the real economy.

It was concluded that financial turmoil characterized by bank threats is more likely to be associated with severe prolonged recessions than those caused of the capital and currency markets. Financial systems appear to be particularly vulnerable to spontaneous contractions in the banking sector, due to the greater leverage and pro-cyclical nature of banking systems. This research finds that financial stress is often, but not always, a precursor to an economic downturn. A rapid expansion of credit, a sharp fall in house prices, and the volume of lending to the corporate and household sectors all contribute to the increased likelihood that stress in the financial system will lead to severe economic downturns. Of all, the banking stress would be the most "dangerous", the recovery from the recessions associated with the financial stress of a banking nature lasts about five quarters.

Concluding the ones mentioned during the article, the construction of an aggregate index of financial stability is still a wish, and the demonstrated synchronization between the periods of financial instability and the economic recessions, emphasizes the importance of its permanent monitoring and the use of all the instruments to maintain the systemic financial stability.

#### Conclusion

Theoretical, methodological and applicative research regarding the conceptualization, evaluation and maintenance of the financial stability of the economic agents under the conditions of the economic cyclicity allows the following conclusions to be formulated:

- 1. The concept of financial stability is currently enjoying enormous attention, but it has not been possible to reach a consensus both in defining and measuring financial stability, as these have been the driving forces behind this research. At the same time, the importance of maintaining financial stability is realized and seems to be assumed by the rulers of the largest economies, once it has been declared as public good.
- 2. The actuality, the importance and in particular the need to research the issue of maintaining financial stability derive mainly from two

reasons: Finance and the financial system itself presents the element of the economic system characterized by the largest and most intense interconnections within it (of the economic system) and the fact that at the present stage of economic development there are no economic agents or areas of human activity, which have no connection with the finances or elements of the financial system, and the Cyclic evolution of the economic system, already recognized as an indisputable truth, and in this context the demonstration by the financial system of a procyclical behavior, justifies the necessity of the sustained efforts in order to maintain the financial stability.

- 3. The literature and economic practice have not yet reached a common point of view regarding the content of the concept of "financial stability", and its relevance starts most often from the opposite notion: "financial instability". As well as most methodologies for measuring financial stability.
- 4. Financial stability is characterized by a dynamic character, which is explained by the fact that, like other sectors of the economy, the financial system is characterized by a permanent qualitative change. This historical evolution is what makes "stability" a relative feature, which results from a certain configuration of the constituent elements of the financial system, orders that change permanently, as generally happens in the living world.
- 5. The financial system is likely to impede the development of normal economic processes and achieve the desired performance in an endogenous manner, even in the absence of exogenous shocks. Thus, "financial stability" does not necessarily mean the absence of crises, as the prevention of imbalances and the accumulation of risks, which could affect the integrity of the financial system and, consequently, the blocking of the real economic processes.
- 6. The common feature of the economic crises of the last half century, shows that the financial component in the crises is more pronounced, and the imminence of the financial risks in the triggering of the crises is already demonstrated.

#### References

Albacete, N., and Lindner, P. (2013). Household Vulnerability in Austria - A Microeconomic Analysis Based on the Household Finance and Consumption Survey. In: *Financial Stability Report*, (25), pp. 57-73. [online]. Available at: https://www.oenb.at/dam/jcr:4b35f13d-56a3-44c8-9d9...cs2\_tcm16-256588.pdf.

- Albulescu, C. (2010). Forecasting the Romanian Financial System Stability using a Stochastic Simulation Model. *Romanian Journal of Economic Forecasting*, No. 1, pp. 81-98.
- Allen, J.F. (1984). Towards a general theory of action and time. *Artificial Intelligence*, 23(2), pp. 123-154.
- Allen, M., Rosenberg, C., Keller, C., Setser, B., and Roubini, N. (2002). A Balance Sheet Approach to Financial Crisis. In: *IMF Working Paper*. Policy Development and Review Department, [online]. Available at: https://www.imf.org/external/pubs/ ft/wp/2002/wp02210.pdf.
- Apostolik, R., Donohue, C. and Went, P. (2009). *Foundations of banking risk: An overview of banking, banking risks and risk-based banking regulation*. London: John Wiley.
- Bank of England. *Financial Stability*, [online]. Available at: http://www.bankofengland. co.uk/financial-stability.
- Basel Committee on Banking Supervision. (2010). *Principles for enhancing corporate governance*. Bank for International Settlements, October 2010.
- Basel Committee on Banking Supervision. (2011). *The transmission channels between the financial and real sectors: a critical survey of the literature*. Working Paper No. 18, February 2011, [online]. Available at: http://www.bis.org/publ/bcbs\_wp18.pdf.
- Bernanke, B., Boivin, S. J., Eliasz, P. (2005). Measuring the Effects of Monetary Policy: A Factor-Augmented Vector Autoregressive (FAVAR) approach. *Quarterly Journal of Economics*, 120(1), pp. 387-422.
- Bernanke, B., Mihov, S. (1998). Measuring Monetary Policy. Quarterly Journal of Economics, 113, pp. 869-902.
- Brave, S., and Butters, A. (2011). Monitoring Financial Stability: A Financial Conditions Index Approach. *Economic Perspectives*, 35(1), pp. 22–43. [online]. Available at: https://ideas.repec.org/a/fip/fedhep/y2011iqip22-43nv.35no.1.html.
- Brave, S., Butters, A. (2011). Monitoring Financial Stability: A Financial Conditions Index Approach. *Economic Perspectives*, 35(1): pp. 22–43. [online]. Available at: https://ideas.repec.org/a/fip/fedhep/y2011iqip22-43nv.35no.1.html.
- Burgin, M. (2005). Elements of the System Theory of Time. *LANL*, Preprint in Physics 0207055, 2002, 21p. [online]. Available at: arxiv.org/pdf/physics/0207055.
- Burns, A., and Mitchell, W. C. (1946). Measuring Business Cycles. In: *NBER Book Series*, Studies in Business Cicles, p. 4.
- CBRT. (2006). *Financial Stability Report*. Central Bank of the Republic of Turkey, June 2006, Vol. 2, [online]. Available at: http://tcmb.gov. tr/wps/wcm/connect/fffef26d-c78e-46f6-b687-84fcff32b04c/06-07. pdf?MOD=AJPERES&CACHEID=fffef26d-c78e-46f6-b687-84fcff32b04c.
- Central European Bank. *Financial Stability Review*, [online]. Available at:https://www.ecb.europa.eu/pub/fsr/html/index.en.html.

- Dattels, P., McCaughrin, R., Miyajima, K., and Puig, J. (2004). Can You Map Global Financial Stability? In: *IMF* WP/10/145, [online]. Available at: www.imf.org/ external/pubs/ft/wp/2010/wp10145.pdf.
- Dell'Arriccia, G., Igan, D., Laeven, L., and Tong, H. (2012). Policies for macrofinancial stability: How to deal with credit booms. IMF Discussion Note, April.
- Goodhart, C., Aspachs, O., Segoviano, M., Tsomocos, D., and Zicchino, L. (2004). Searching for a metric for financial stability. In: *LSE Financial Markets Group* Special Paper Series, Special Paper no 167, May 2004.
- Lutton, T. (2006). Early Warning Systems. In: *IMF-NBR Regional Seminar*, Sinaia, 7-9 November 2006.
- Mankiw, N.G. (2008). *Principles of Economics*, 6th Edition. Harvard University. Cengage Learning, 890p.
- Moinescu, B. (2007). Early Warning System of CAMP Rating Downgrade Events. In: *NBR*, OP/07, [online]. Available at: www.bnr.ro/files/d/Pubs\_en/OP/op0707.pdf.

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#### COMPANY TAXATION AT NATIONAL AND EUROPEAN LEVEL

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**Abstract:** The directions of adaptation of the taxation regarding the stimulation and favoring of the stability and the competitiveness of the Romanian companies start on the one hand from the strategic objectives of the European Union, as they were defined in terms of competitiveness, and on the other hand from our national objectives. mentioned both in the government programs, but especially in the competitiveness strategies realized by the relevant institutions. The key factor in achieving real convergence is competitiveness. A faster increase in competitiveness can lead to a reduction in the economic gaps. The efficiency of the markets of goods, labor and capital that must take into account social imperatives (inclusive economic growth) would favor a higher degree of business value and the promotion of endogenous economic growth engines - greater investments in innovation, research and development and human capital. Romania needs a healthy economic growth, a growth that will not generate unbalances difficult to control. Therefore, in this paper we aim to address elements of fiscal influence at national and European level, such as: increasing tax revenues in order to reduce the disparities compared to *EU Member States; supporting research and innovation in the field of finance;* fiscal compliance and fiscal predictability; fiscal policies, unitary cost of labor force; aspects regarding the underground economy.

**Keywords:** *taxation; competitiveness, financial innovation* **JEL Classification:** *O30, P43, Q56* 

#### Introduction

Also, increasing competitiveness depends essentially on the activity of companies, their decisions to invest, and these decisions are conditioned by

other elements, which refer to institutions (property law, regulatory barriers, programs and incentive measures). of the competitiveness of the business environment), or elements that relate to the efficiency of the market (the efficiency of the legal framework, the impact of taxation, the number of procedures required to start a business, competition, trade barriers, the labor market and the financial market).

Therefore, the way in which the convergence process can be accelerated is to focus on the essential issues of the economy: encouraging entrepreneurship, developing SMEs, increasing the business environment competitiveness, developing domestic production and exports through retraining investments, ensuring a friendly fiscal framework and stable, balanced fiscal policies based on public investments and structural reforms.

#### **Research methodology**

To substantiate this paper, we used observation and examination tools, research methods based on the basic principles of scientific research, and also created procedures based on factual analysis, as a result of significant practical experience and intensive documentation at the level of the specialized literature existing internally and internationally.

#### **Research results**

Establishing some directions for adapting the taxation in order to promote stability and competitiveness has as a starting point the current situation in Romania, from a fiscal perspective. These directions imply: the increase of the tax revenues to the state budget (we present in this context comparative aspects regarding the situation of the tax revenues in Romania and the EU), the increase of the level of collection, the stimulation of investments in research development through fiscal facilities, the increase of the degree of fiscal compliance, fiscal predictability.

# **1.** Increasing tax revenues in order to reduce the disparities compared to EU Member States

#### 1.1. Tax revenues in Romania and the EU

In the perspective of increasing competitiveness, fiscal policy plays an extremely important role, and in this context, improving the collection of tax revenues represents an undeniable wish, given that they are below the European average.

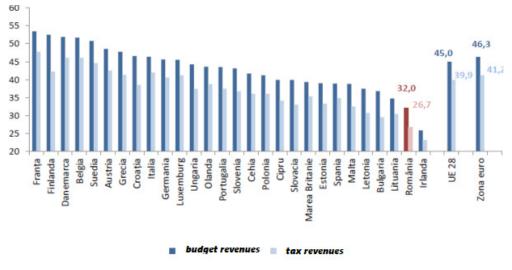


Figure 1. Budget revenue vs. tax revenue in the EU, 2018 (% of GDP)

Source: Fiscal Council, 2019a, Annual Report 2018

Romania registers among the lowest budgetary revenues among the countries of the European Union (% of GDP), being ranked in the penultimate place, only Ireland having a smaller proportion; Among the causes are the reduced taxation (through the fiscal relaxation measures adopted lately, in order to attract foreign capital), the problems related to tax compliance, or granting a multitude of deductions and exemptions from the payment of taxes.

In 2018, our country registered a level of budget revenues of 32% (weight in GDP), below the European average - 45% of GDP. The level of tax revenues (taxes and social contributions) reported to GDP in Romania reached 26.7% of GDP in 2018, still being in the penultimate place (EU average - 39.9% of GDP). The main problem we consider is that of collection. The improvement of the collection implies the structural development of the economy, the efficiency of the use of fiscal policy instruments (deductions, exemptions, etc.), but especially the increase of the degree of fiscal compliance.

Compared to other countries with economies similar to Romania, the share of tax revenues in GDP is significantly lower than in Hungary (37.4%), Slovenia (36.7%), Czech Republic, Poland (36.0%) or Bulgaria (29.5%).

The structure of the tax revenues in Romania in 2018 has changed significantly, compared to the previous years, the year 2018 being the first year in which the share of indirect taxes in tax revenues is outpaced by that of the income from social contributions, although the share of indirect taxes in tax revenues has decreased compared to the previous year. The share of indirect

revenues in total tax revenues, in 2017, was 39.9% compared to the EU28 average of 33.7%. The share of revenues from social contributions in fiscal revenues in 2018 reached a level of 42.7% (Romania being the fourth place in the EU28). In contrast, the share of direct taxes in tax revenues has decreased to 18.4% (compared to 23.7% in 2017), this category of income being strongly affected by the reduction of income tax from 16% to 10%.

Indirect taxes continue to be an important component of tax revenues in Romania, a characteristic characteristic of developing countries, their share in total tax revenues being significantly above the EU average (+ 5.4 pp), even if in 2018 they were there were reductions in the share of indirect tax revenues compared to the previous year.

The fiscal relaxation measures of the last four years which led to the reduction of the standard VAT rate from 24% in 2015 to 19% in 2017 simultaneously with the extension of the reduced VAT rates, have contributed to the significant reduction of the gap between Romania and the EU average compared to 2010-2015. Thus, the fiscal consolidation initiated in 2010, which aimed at increasing indirect taxes, contributed to increasing their share in total tax revenues (from 43.9% in 2010, to 47.3% in 2015), while at EU level this indicator ranged from 33.6% to 33.9% in the same period.

The structure of the budgetary revenues in Romania is mainly oriented towards indirect taxes and revenues from social contributions, while, at European level, there is a tendency to balance the share of direct, indirect taxes and income from social contributions; many Member States, which have recorded high weights of budget revenues in GDP, also benefit from relatively high weights of direct taxes in total revenues.

	2009	2012	2013	2014	2015	2016	2017	2018	2018/ 2017
Total revenue	30,3	33,7	33,3	34,1	35,4	31,8	30,9	32,0	1,1
Tax revenues, of which:	16,1	18,9	18,6	18,9	19,8	17,7	16,4	15,3	-1,1
- Indirect taxes	10,2	13,1	12,7	12,7	13,2	11,3	10,3	10,4	0,1
- Direct taxes	3,9	5,8	5,9	6,2	6,6	6,4	6,1	4,9	-1,2
- Social insurance contributions	2,3	8,8	8,6	8,5	8,1	8,8	9,4	11,4	2,0

Table 1. Evolution of tax revenues in the EU,% of GDP

Source: Fiscal Council, 2019a, Annual Report 2018

Compared to the previous year, in 2018 there was a 1.9 pp increase in GDP. The fiscal revenues had the most unfavorable evolution (according to the annual report of the Fiscal Council), against the background of new fiscal relaxation measures introduced in 2018, the evolution being the following:

- income tax (-1.1 pp from GDP), as a result of reducing the income tax quota by 6 pp from January 1, 2018;
- excise duties (-0.1 pp of GDP), due to the legislative changes regarding the reduction of the excise duty level for energy products in certain categories of activities;
- profit tax (-0.05 pp of GDP), as a result of the changes made to the tax regime of micro-enterprises;
- property taxes and taxes (-0.05 pp of GDP).

From the perspective of the income tax revenues, the income from the taxation of the profits of the companies can be found within the chapter "Income tax, profit and capital gains from legal persons", which includes both the income tax and the income tax receipts microenterprises, the latter representing most of the revenues from the subchapter "Other taxes on income, profit and capital gains from legal persons". To these two subchapters is added starting with the year 2017 and the specific tax that is found in the budget execution in the chapter "Other taxes and taxes", even though from the economic content point of view it is a way of taxing the profits of the companies, replacing the tax on profit for the categories of activities that fall under its scope.

It should be mentioned that in 2018 the process of starting (gradually starting in 2015) continued the gradual extension of the scope of the tax on the income of micro-enterprises at the expense of the corporate income tax. Thus, starting with February 2018, the ceiling of annual revenues was raised again until a company is considered a micro-enterprise from the equivalent in lei of 500,000 euros to 1,000,000 euros, and the companies that make revenues from consulting and management, in proportion of over 20% of the total revenues, are no longer excluded from the category of micro-enterprises.

The budgetary receipts for the period 2015-2017 related to the chapter "Income tax, profit and capital gains from legal persons" together with their details on sub-chapters can be found in the following table:

	2015	2016	2017		on from the year (%)
				2016/2015	2017/ 2016
Income tax, profit and capital gains from legal entities	14,75	16,35	16,11	10,84	-1,46
Total profit tax, of which:	13,77	15,39	14,69	11,78	-4,57
Profit tax from economic agents	13,25	15,09	14,00	13,88	-7,18
Profit tax from commercial banks	0,52	0,31	0,69	-41,44	124,10
Other income taxes:	0,98	0,96	1,42	-2,35	48,65
Tax on the income of micro-enterprises	0,87	0,83	1,32	-4,71	59,10
Specific tax	-	-	0,1	-	-

Table 2. Income from "Income tax, profit and capital gains from legal persons" between 2015 and 2017 (MDL MDL)

Source: Fiscal Council, 2019b

In 2016, the revenues from the taxation of the profits of the Romanian companies totaled about 16.35 billion lei, increasing by 10.8% compared to the previous year. In the structure, the revenues from the income tax increased by 11.8%, supported by the increase of the amounts paid by the non-bank economic agents by 13.9%, while the component "Other taxes on income, profit and capital gains from legal entities" was characterized by a decrease of 2.3% in the conditions of reducing the income from the tax on the income of micro-enterprises by 4.7%.

In 2017, the receipts related to "Income tax, profit and capital gains from legal persons" decreased by 1.5%, provided that the income tax revenues decreased by 4.6%, the equivalent of about 700 million lei, an evolution that could not be compensated by the increase of the revenues from the tax on the income of micro-enterprises by 59.1% or about 490 million lei.

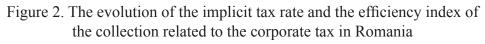
These developments are closely related to the changes made at the level of taxation of corporate profits. These were partially offset at the aggregate level of budget revenues, by higher revenues from:

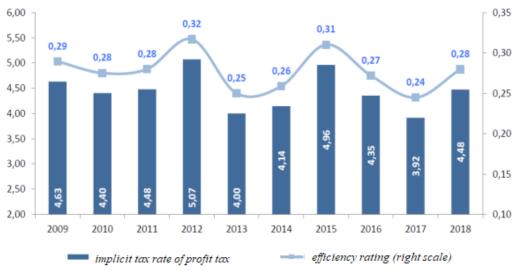
• social insurance contributions (+2.04 pp of GDP) as a result of the impact of changing the social contributions regime by transferring them from the employer to the employee and some payments from legal entities for the disabled;

- amounts received from the EU on account of payments made (+0.88 pp of GDP) of which: amounts related to the financial framework 2014-2020 (+0.45 pp of GDP) and other EU funds (+0.43 pp ), as this is a new category of income introduced on the occasion of the second budgetary rectification, corresponding to the ex-post settlement on European funds of projects already realized with non-EU financing;
- non-tax revenues (+0.32 pp of GDP) on account of the dividends distributed by the state-owned companies.

#### 1.2. The degree of revenue collection

The low share of tax revenues in GDP, compared to the EU average, has multiple causes, including the low degree of tax compliance, the imposition of lower tax rates than in other Member States, in some areas, or the provision of deductions and exemptions, all of which affect the level of tax revenues and collection efficiency (The efficiency of collection is calculated as a ratio between the default rate of taxation (defined as the ratio between the incomes actually recorded from taxes and the macroeconomic basis of taxation) and the legal rate of taxation).





Source: Fiscal Council, 2019, Annual Report 2018

*The efficiency index of collecting taxes* paid by companies registered the highest value in the post-crisis period in 2012 (due to the resumption of economic

growth in 2011), followed by a significant decrease in the next two years. In 2015 there was an improvement in the efficiency of the collection, the index approaching the level registered in 2012, but temporarily, whereas, due to the reduction of the income tax revenues, the index decreased in the next two years, in 2017 being the lowest one its value throughout the period analyzed.

In 2018, the efficiency index of collecting taxes paid by companies increased from 0.24 in 2017 to 0.28, due to the taxes paid by companies, compared to the previous year. Considering that the revenues from the corporate tax have increased slightly, compared to 2017, the improvement of the collection efficiency is most probably due to the evolution of other categories of receipts (eg from the income tax on microenterprises), as well as the evolution payments of taxes made by companies to beneficiaries other than the Romanian state.

*Efficiency of collecting tax on profit* (calculated as a ratio between the implicit tax rate (the ratio between the direct taxes paid by the companies and the gross operating surplus) and the legal tax rate) saw an improvement in 2018 compared to previous years. In the table below we present the comparative situation with other states.

Company		Legal share of			Default tax			Tax efficiency index**			Position		
Country	corporate tax				rate*					2016 2017 2018			
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2010	2017	2018	
Bulgaria	10	10	10	4,6	5,1	5,1	0,46	0,51	0,51	1	2	1	
Cehia	19	19	19	7,0	7,1	7,0	0,37	0,38	0,37	2	3	3	
Estonia	20	20	20	4,4	4,0	5,3	0,22	0,20	0,26	10	10	8	
Letonia	15	15	20	4,5	3,7	3,4	0,30	0,24	0,17	5	8	10	
Lituania	15	15	15	3,5	3,3	3,4	0,24	0,22	0,23	8	9	9	
Ungaria	19	9	9	6,0	5,2	3,8	0,31	0,58	0,42	4	1	2	
Polonia	19	19	19	4,4	4,7	5,2	0,23	0,25	0,27	9	6	7	
Romania	16	16	16	4,4	3,9	4,5	0,27	0,24	0,28	6	7	5	
Slovenia	17	19	19	4,3	4,8	5,2	0,26	0,25	0,27	7	5	6	
Slovacia	22	21	21	7,0	7,2	6,5	0,32	0,34	0,31	3	4	4	

Tabel 3. Efficiency of collecting tax on profit

Source: Fiscal Council, 2019, Annual Report 2018

\* it was calculated as a ratio between the budget receipts from direct taxes paid by companies and the basis for calculating the corporate income tax (approximated by the gross operating surplus from the national accounts, which also includes the unobserved economy).

\*\* the tax efficiency index is calculated as a ratio between the budget revenues from direct taxes paid by companies and the standard corporate tax rate \* gross operating surplus or as a ratio between the implicit tax rate and the legal tax rate.

Therefore, Romania is in fifth position in 2018, a short distance from Slovenia (0.27), Poland (0.27) and Estonia (0.26), which occupy the following places. On the other hand, Bulgaria (0.51) and Hungary (0.42) remain in the first two places, at a significant distance from the other states.

At the level of 2018, there is a slight general tendency to improve the efficiency of collecting the income from the taxes paid by companies, five of the ten analyzed states registering increases of the efficiency index, while Bulgaria remained at the level registered in the previous year.

Regarding the considerable decrease of the efficiency index in the case of Hungary, this is due to the reduction of the tax rate on profit from 19% to 9% (starting with 2017), which caused a significant increase of the index in 2017 on the fund the achievement of some income from the profit tax calculated on the old quota of 19% (result of a fiscal facility granted to the companies that allowed them to defer payment of the tax on profit).

# 1.3. The efficiency of the system of taxes and duties

The process of simplifying the tax system and reducing bureaucracy has gradually taken place, the recognition of these advances being highlighted by the World Bank's Doing Business report - the Paying taxes indicator made by PricewaterhouseCoopers. Thus, the latest available report, Paying taxes 2020 (with reference year 2018), ranks Romania, from the perspective of ease of payment of taxes, at position 32 in 190 countries analyzed, a much better position, compared to the previous year (position 49). Compared to last year, in 2017, the number of hours required to pay taxes remained the same (163 hours), as did the number of annual payments a company must make to pay taxes and taxes (14 payments), and the weight taxes and taxes in total profit decreased to 20.0% compared to 40% (due to the change in the tax regime of social contributions).

Romania's position in 2018 in the first third of the global ranking of Paying Taxes 2019 is a positive result, but maintaining a leading position implies efforts to continue investments in fiscal infrastructure and technology, because the digitization of financial reporting processes has the potential to streamline processes internal tax authorities, including the control and verification mechanisms, also for the benefit of taxpayers.

An	EE	LV	SI	LT	BG	SK	PL	CZ	HU	RO
	The ease with which taxes and fees are paid (position)									
2016	14	13	58	18	90	48	51	53	93	42
2017	14	13	41	18	92	48	69	45	86	49
2018	12	16	45	18	97	55	72	53	56	32
	N	umber o	of annua	ıl payme	ents for	paymen	nt of tax	obligati	ons	
2016	8	7	10	11	14	8	7	8	11	14
2017	8	7	10	10	14	8	7	8	11	14
2018	8	7	10	10	14	8	7	8	11	14
		The nui	nber of	hours p	er year	to pay tl	he tax ol	oligation	ns	
2016	50	169	245	109	453	192	290	248	277	163
2017	50	169	233	99	453	192	334	230	277	163
2018	50	169	266	95	441	192	334	230	277	163
				Fotal tax	x rate (%	6 of pro	fit)			
2016	48,7	35.9	31.0	42,7	27,1	51.6	40,5	50,0	46,5	38,4
2017	48,7	32,6	31,0	42,6	27,7	49,7	40,7	46,1	40,3	40,0
2018	47,8	38,1	31,0	42,6	28,3	49,7	40,8	46,1	37,9	20,0*

Table 4. The efficiency of the system of taxes and duties

Source: World Bank, Doing Business Reports 2018-2020

\* Romania made the payment of taxes less expensive by eliminating five taxes and contributions paid by employers. At the same time, Romania introduced a new labor insurance contribution paid by the employer.

#### 2. Supporting research and innovation

The investments made in the field of research and development represent an important factor that determines the increase of the competitiveness, boosting the employment and compensating for the dysfunctions of the market, contributing, finally, to the development and the economic growth. Therefore, the governments of the different states have adopted various measures with the purpose of supporting and promoting the activities of the RDI within their own jurisdictions, both by granting subsidies and by providing fiscal incentives.

At the level of the European Union, besides reducing the rates of the corporate tax, measures were taken regarding some fiscal facilities to support the activity of the companies. The research and development activity, as well as other actions aimed at encouraging business development, benefit from more support from governments to be competitive - Denmark, Germany, Italy, Poland (increase of general tax deduction, special provisions for SMEs).

Measures are also being taken to encourage innovative start-ups and start-ups - Latvia, Ireland (a reduction in the capital gains tax for entrepreneurs). As regards capital investments, Hungary, Portugal and Cyprus have introduced tax incentives for investors offering financing to young businesses. Currently, in Romania there are four programs to stimulate research and development:

- exemption from the payment of the tax on profit in the first 10 years of activity for companies that carry out exclusively research-development and innovation activities, as well as related activities;
- the additional deduction of 50% of the eligible R&D expenses when calculating the corporate tax;
- accelerated depreciation of qualified research and development assets;
- exemption of income tax from salaries for employees who carry out activities in the fields of research and development or technological development.

Economic growth is based on three main components: a) capital accumulation - including investments in real estate, equipment and human resources, b) population growth and, consequently, labor force, and c) technological progress. In this context, over time, theories have emerged that point to the importance of technological change in the equation of economic growth, supporting the idea that its main engine is innovation.

Encouraging research-development-innovation we believe that it can be achieved through fiscal-budgetary policies:

- Clarifying the way in which the activities of the RDI are defined that are eligible for the implementation of the fiscal facilities implemented, either by including in the legislation more detailed definitions, or by developing guides with examples of activities / processes eligible for various fields of activity;
- Defining guidelines regarding how the tax authorities will evaluate the eligibility of the projects / activities of the RDI for the application of the specific fiscal facilities;
- Clarification and simplification of the administrative conditions for the application of the existing fiscal facilities, so that the benefits obtained are not exceeded by the costs associated with the implementation of the facilities. For example, as an alternative to the existing regulations, certain conditions can be defined, in exchange for fulfilling which employers can apply the income tax exemption in a simplified manner and on the whole wage income obtained by the employees involved in research and development activities and innovation. Thus, the degree of access of the tax facilities for the existing RDI could significantly increase, resulting in the increase of the investments of the private environment in the RDI;

- Extension of tax facilities and their adaptation to the specific of certain types of entities, such as SMEs or companies in certain fields of activity:
  - Extending the tax exemption of the reinvested profit or granting higher deductions for the acquisition of innovative technologies, which would indirectly stimulate the creation of new technologies through RDI activities;
  - The possibility of receiving tax credit and thus obtaining tax refunds (instead of the additional deduction), at least in the case of SMEs, thus making the facility much more attractive for companies in the start-up phase, which record tax losses and has difficulties in obtaining financing;
  - The introduction of differentiated RDI tax facilities for SMEs or for certain sectors of activity considered to be of strategic importance. For example, in addition to the tax credit, SMEs could also benefit from simplified conditions for documenting their activities;
- Targeted financing of research projects from the state budget, both for public institutions and for private entities (for example, granting incentives for the registration of new patents, granting grants for research projects in certain fields of activity of interest strategic for the Romanian economy, etc.).

Currently, the expenditures on research and development in Romania in 2017 were 0.5% of GDP, the lowest in the EU and representing only a quarter of the national target.

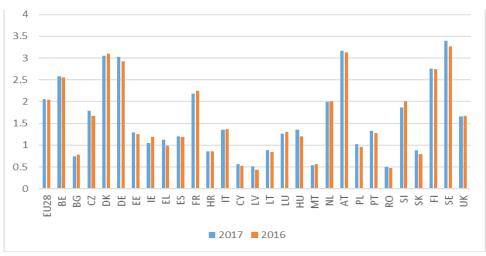


Figure 4. Research & development spending in EU (% of GDP) in 2016-2017

Source: Eurostat, 2019a

It is thus noted that, among the EU member states, Romania allocates resources well below the European average, ranking very close to the last place of the ranking

# Fiscal compliance and fiscal predictability

There are still significant differences between EU countries in terms of tax compliance costs. The complexity of the tax systems, the high level of compliance costs and the lack of fiscal security consume productive resources and act as a barrier to business and investment. The high level of tax compliance costs mainly affects SMEs.

Compliance costs come mainly from the time spent on this task, with no direct costs such as accounting costs.

In order to improve the business environment, the reform of the tax systems can target the following:

- simplification and reduction of tax obligations, in particular for emerging entrepreneurs and smaller enterprises,
- extending the range of electronic services and making them available in one-stop shops,
- conducting awareness-raising, information and advisory actions for taxpayers of companies, in order to help them comply with tax regulations, including through social communication channels.

Harnessing the opportunities offered by new innovative economic models is important to prepare tax systems to meet the challenges of the future. EU countries are increasingly relying on digital integration to facilitate tax compliance and are encouraged to further simplify and clarify the application of tax regulations in the case of the collaborative economy. They are also encouraged to facilitate and improve the collection of taxes by exploiting the potential of collaborative platforms, which are encouraged to cooperate with national authorities.

The clarity, stability and predictability of tax law, as well as its implementation and interpretation are essential conditions in investment decisions. Any changes to the legislation, including its interpretation, should be adopted after consultation with the business environment and properly applied by the tax authorities, only for the future, and not retroactively.

Referring to the obstacles encountered in the development of business, first is the fiscal and legislative uncertainty, followed by the lack of political stability and the vision of public policies and bureaucracy. Thus, the most important obstacles in the development of business for the boards of directors and executives in Romania relate to the public policies and factors controlled by the state institutions. Other obstacles are lack of entrepreneurial education and difficult access to finance.

Regarding the effects of the frequent legislative changes, beyond the feeling of uncertainty induced in the market, they consisted of the fluctuation of the exchange rate, the restriction of the extension of personnel, the negative impact on the profitability of the company by increasing the expenses with the employees and by the lack of investments, the reluctance of the clients to incur expenses, additional costs of complying with the new fiscal measures, or impairing corporate governance and redirecting profit to dividends, rather than investments. In conclusion, all these effects lead to a decrease in the competitiveness of the Romanian companies.

When we talk about fiscal unpredictability, we exemplify the fact that in the first 6 months of 2019, the legislative framework was majorly modified, being adopted 614 normative acts: 120 Laws, 4 Government Ordinances, 46 Government Emergency Ordinances, 444 Government Decisions Government, to which are added the orders of ministers.

With this huge volume of normative acts adopted in the first quarter of 2019, it is foreseeable that Romania will continue to place this year in the first place in the regional top of the legislative changes (in Central and Eastern Europe), while in other ones states the tendency is to simplify and ensure a stable and predictable legislative framework, an essential condition for investors. Trust in the tax system is an essential condition for investors, predictability being one of the most important factors influencing investment decisions.

The fiscal policy in Romania needs more stability, transparency and predictability, and the administrative burden on the taxpayers should be reduced by streamlining and computerizing the tax administration system in order to reach a fast and flexible fiscal system that will lead to the improvement of the tax contribution. Romania's propulsion in the international tops of competitiveness. A less excessive bureaucracy, encouraging investments and even lowering tax rates, as well as facilitating an efficient and coherent dialogue between tax authorities and taxpayers could be other pluses in increasing Romania's competitiveness. Thus, the changes necessary for Romania to advance in the top of the global competitiveness may be the reduction of the number of taxes and the related payments or the encouragement of investments (by fiscal incentives, as well as by avoiding discouraging investors due to some fiscal policy decisions, such as increasing the tax rates or introducing new taxes).

#### The unit cost of labor

The unit cost of labor can be considered not only the best indicator of approximating inflationary pressures from costs, but also the indicator that reflects competitiveness through the cost of an economy or a group of countries.

The workforce plays a major role in the functioning of an economy. From a business perspective, this represents a cost (labor cost) that includes, in addition to the salaries and wages paid to the employees, and the non-wage costs, in particular the social contributions payable by the employer.

In 2018, average hourly labor costs across the economy (excluding agriculture and public administration) were estimated at 27.4 euros in the European Union (EU) and 30.6 euros in the euro area. However, the average shows significant differences between EU Member States, with the lowest hourly labor costs recorded in Bulgaria (5.4 EUR), Romania (6.9 EUR), Lithuania (9.0 EUR), Hungary (9.2 EUR) and Latvia (9.3 EUR) and the highest in Denmark (43.5 euro), Luxembourg (40.6 euro), Belgium (39.7 euro), Sweden (36.6 euro), The Netherlands (35.9 euros) and France (35.8 euros).

Hourly labor costs in industry were 27.4 euros in the EU and 33.2 euros in the euro area. In services, they were 27.0 euros and 29.6 euros, respectively. In construction, the hourly cost of labor was 25 euros in the EU and 27.6 euros in the euro area. In non-economic activities (except public administration), they amounted to 28.5 euros, respectively 30.8 euros. Labor costs consist of wages and non-wage costs (for example, employers' social contributions). The share of non-wage costs in the total labor costs for the whole economy was 23.7% in the EU and 25.6% in the euro area. It ranged from 6.1% in Malta to 32.6% in France. These estimates are issued by Eurostat, the statistical office of the European Union. The data covers companies with 10 or more employees and is based on data on the Labor Cost Survey for 2016, which are extrapolated through the Labor Cost Index.

In Romania, firms have the largest percentage increases in labor costs, including wages, compared to the situation throughout the European Union, according to Eurostat (we refer to the percentage increase in wages; in absolute figures, Romanian employees remain among the last in the EU regarding the money they actually receive from employers). In the business sector (private, state and mixed companies), the hourly cost of labor increased by 13.7% in the first 3 months of 2019 compared to the first quarter of 2018. The breakdown by components, the cost with wages increased by 13.8% and by 9.7% non-wage costs (ie social insurance and other benefits) increased. For comparison, on average, companies in the European Union have incurred increases in the hourly labor cost of 2.5% in the first 3 months of 2019 compared to the same

period last year. These increases in labor costs appeared against the background of the increase in the minimum wage. The gross minimum wage in Romania exceeds the average of the region of Central and Eastern Europe. At the same time, it has the highest effective tax rate among the states in the region, of 41.5%, according to the Deloitte analysis (2018). The effective tax rate remains the highest, 41.5%, and in the case of a gross salary of 1,000 euros, for which the region average is 27%.

Due to the transfer of social insurance contributions to the employee and the increases in the gross minimum wage, Romania exceeds the average gross minimum wage in the region, by 421 euros, surpassing five states. In contrast, the other 10 countries have lower effective tax rates, the average being 21%, compared to 41.5% in Romania. The Deloitte Romania analysis (2018), based on the calculations provided by the member companies of the Deloitte network, includes Romania, Bulgaria, Serbia, Croatia, Hungary, Slovakia, Czech Republic, Poland, Estonia, Lithuania and Latvia. In the case of Romania, the value of the minimum gross salary in the amount of 2,080 lei was taken into account. The gross minimum wage varies between 500 euros (Estonia) and 261 euros (Bulgaria), the average being 421 euros.

Country	min.brut	I am a	Income	Net	Ι	Full	Net	Effective
	salary	committed	tax	salary	contribute	wage	salt%	tax rate
	(euro)	employee			employer	cost	in salt	(%)
					shock		brut	
Estonia	500	18	-	482	169	669	96	4
Lituania	400	63	3	361	125	525	90	10
Cehia	472	52	15	405	160	632	86	14
Slavacia	480	64	18	397	169	649	83	17
Letonia	430	47	37	346	104	534	81	19
Croatia	499	92	-	367	79	537	80	20
Bulgaria	261	36	22	202	51	312	78	22
Polonia	485	104	28	354	99	585	73	27
Ungaria	426	79	64	283	89	515	66	34
Romania	446	156	29	261	10	456	58	41,5
Medium	422	67	21	334	100	522	79	21
RO	24	89	8	-73	-90	-66	-21%	21%
difference								
/average								

 Table 5. Comparative situation regarding the effective tax rate of the minimum wage in Romania and Central and Eastern European states

Source: Deloitte, 2018

The main findings of the analysis were:

- Estonia has the lowest effective minimum wage tax rate of 4%, followed by Lithuania (10%) and the Czech Republic (14%), and Romania, the highest rate, 42%, the average being 21%.
- The effective rate of taxation of a gross salary of 1,000 euros is the highest in Romania (42%), Hungary (34%), Latvia (29%) and the lowest in Estonia (13%) Bulgaria (22%), Lithuania (23%).
- Romania has the lowest level of contributions due by the employer (2.25%), the average being about 23% in both cases.

Romania presents an increase of the average gross salary of about 41% in the last two years. However, if we take into account the effective tax rates, the net minimum wage in Romania drops towards the end of the same ranking. This means that, at the end of the month, the Romanian employee takes the least money "in hand", unlike other countries in the region. However, it should be mentioned that at the level of the employer, the costs are the lowest in Romania, but they have no impact on the employee. However, in both situations - ratio to gross salary and full wage cost - taxes and contributions to public systems in Romania significantly exceed the region average.

#### Aspects regarding the underground economy

A recent analysis by the IMF (Medina and Schneider, 2018) estimated the level of the underground economy as a percentage of Romania's GDP at 26.3%, for 2016, ranking fourth in the EU. The largest share of the underground economy is in Bulgaria, with 29.6% of GDP, but it has made considerable efforts lately to combat these activities.

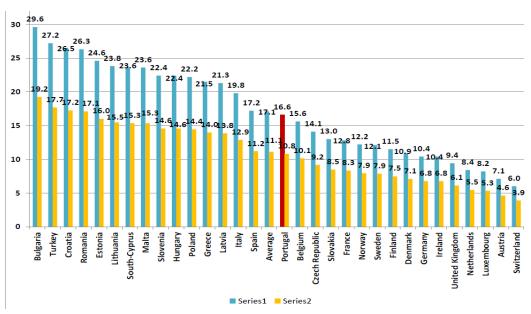
The average size of Romania's underground economy in the period 1991-2015 was 30.14% of GDP, with a maximum in 1991 of 36.03% and a minimum of 22.73% in 2014. The contribution of the hidden economy in the Romanian economy it has decreased significantly since 1991 overall, with slight variations over the years. Since 1991 there has been a downward trend and in 1997 it reached a weight of 31.65%. In 1999, it rose by more than three percentage points, to 34.4% of GDP, then returning to a downward trend.

The economic crisis has led to an increase in the size of the informal economy in almost all European states. The contribution of the Romanian hidden economy increased in 2009 to 28.23% of GDP, from 25.44% in 2007, an increase of almost 3 percentage points. After 2009, the share of these types of activities decreased steadily, reaching in 2014 to 22.73% of GDP. The causes of the size and development of the underground economy are manifold, among

them the burden of taxes and taxes in general and the tax burden on work in particular (especially that of social security contributions) being determinant factors for the size of the hidden economy. In Romania, the fiscal burden, the difference between the total costs of the employer and the net salary of the employee, is 36.7%, ranked 7th in the European Union and the largest in Central and Eastern Europe. The European average is 32.5% (Dumitru, 2018). Other factors that influence the level of the unofficial economy are: state control over corruption, government effectiveness (quality of public services, quality of social services), rule of law, but also the ability of the government to effectively regulate the economy, so as to enable and benefit development the private environment, labor market regulations.

The reduction of the level of the underground economy is due to the same factors that are decisive for its size, but also to the digitization of the Romanian institutions, in particular the fiscal authority. Also, the level of the taxes on labor, the quality of the public services, the efficiency of the spending of the public money are other factors that would lead to its decrease.

Comparatively, the average size of the hidden world economy is 31.9% of GDP. Of the 158 countries analyzed, the largest share of the underground economy exists in Zimbabwe - 60.6% - and Bolivia - 62.3% of GDP. The lowest rates of this economy are found in Austria - 8.9% of GDP - and Switzerland - 7.2% of GDP (Medina and Schneider, 2018).



#### Figure 5. Underground economy at EU level

Source: Medina and Schneider, 2018

### Conclusions

Competitiveness, at country / sector / firm level, means productivity, labor force, investment, friendly environment in which the respective entity operates. Taxation influences all these factors. Trust in the tax system is an essential condition for investors, predictability being one of the most important factors influencing investment decisions.

The fiscal policy in Romania needs more stability, transparency and predictability, and the administrative burden for taxpayers must be reduced by streamlining and computerizing the tax administration system in order to reach a fast and flexible fiscal system that will lead to improving the contribution of taxation to Romania's propulsion in international competitiveness rankings. A less excessive bureaucracy, encouraging investments, as well as facilitating an efficient and coherent dialogue between tax authorities and taxpayers could be other pluses in increasing Romania's competitiveness.

Therefore, in order to ensure the stability and stimulate the competitiveness of the Romanian companies, it is necessary, first of all that the tax revenues to the state budget increase. This can be achieved by: increasing the level of collection, encouraging fiscal compliance, through measures leading to a reduction in the cost of labor, reducing the underground economy, encouraging investments.

Reducing the fiscal pressure on the business environment can be considered one of the measures to stimulate the competitiveness of companies at national and European level. To support this measure, the data regarding the ranking provided in Global Competitiveness Report 2017 - 2018 (WEF, 2018), respectively on the indicator "Effect of taxation on the incentives to invest" are relevant, Romania ranked 121st globally in 2017, rising 7 places in front from 2014, but at a distance from the target of "70th place" proposed by the National Strategy on Competitiveness (SNC) for 2020.

Moreover, on the indicator "Total taxation rate", Romania was ranked 73rd in 2017, again in progress with 18 positions in the world ranking compared to 91st place in 2014, but far from the 50th place, targeted by the SNC for 2020. Regarding the "Effect of taxation on incentives to work", Romania was 126th place in 2017, with a jump of 14 places compared to 140 in 2014, but below the target assumed by the SNC, respectively 70th place in 2020. appreciated the fact that in recent years we are seeing progress compared to 2014, but we still have much to achieve the targets proposed by strategy by 2020.

Another measure to promote the stability and competitiveness of the Romanian companies is given by the improvement of the access to financing of the companies and, in particular, of the SMEs. And for this measure we refer to the data of the last edition "Global Competitiveness Report 2017-2018", respectively the presentation of the indicator "Existence of financial resources", which places Romania on the 121st place in the world in 2017, in a decrease from the 93rd place 2014 and at a distance from the target proposed in the national strategy, respectively the 50th place in 2020. Also within the same report, at the indicator "accessibility of financial services", we are on the 119th place, falling from the 66th place in 2014 and at a significant distance from the target proposed in the national strategy, namely the 45th place in 2020. Also regarding the improvement of access to finance, we have in the same report, the indicator "regulating exchanges of financial instruments", where we find the 114th place in the world, down from the 101st place in 2014 and at a distance from the target of the Na Strategy Competitiveness law or 60th 2020.

Also as a measure to stimulate the development of the competitiveness of the business environment, it is also the measure regarding the improvement of the degree of transparency of both the authorities and of the public and private companies. According to the latest "Global Competitiveness Report 2017-2018" published by the World Economic Forum (2018), Romania was 113th in the world in terms of Transparency of Public Policies, down 3 places from 2016 and at a distance from the target of the place. 40 within our strategy.

*Improve the predictability of decisions regarding the fiscal changes* (governmental decisions) related to the business environment. It should be mentioned that although we have art. 4 of the Fiscal Code<sup>1</sup> dedicated to predictability, this is not respected, given that successive fiscal changes have been introduced in the last two years, without consistent public consultation. Most of the times, public consultations with the business environment have been organized before the issuing of the new legislative measures that affect it, based on the principle "changes of the changes made in a hurry".

Also as a measure to stimulate the competitiveness at the level of the business environment is also the measure to support the improvement of the regulatory framework regarding Public-Private Partnership.

<sup>1</sup> Art. 4. (1) The present code is amended and supplemented by law, which comes into force within a minimum of 6 months from the publication in the Official Gazette of Romania, Part I. and (2) If by law it is introduce new taxes, duties or contributions, increase existing ones, eliminate or reduce existing facilities, they will enter into force on January 1 of each year and will remain unchanged at least during that year;

Currently, in Romania, public-private partnerships are practically nonexistent (0% of GDP), compared to the European average of 0.4% of GDP. On the opposite side are Slovakia (2.9% of GDP) and Portugal (2.73% of GDP) in the EU (Eurostat, 2019) According to the National Competitiveness Strategy, the establishment of sectoral working groups was envisaged to ensure transparency, predictability, monitoring and accountability regarding the regulatory framework, but so far we do not know that they exist.

Another measure regarding boosting the competitiveness of SMEs is the measure on Research, development and innovation - supporting SMEs in order to launch innovative products or services through venture capital funds, grants, collaborative projects (Paul, 2018). According to the White Paper of SMEs (2017, made by Prof. Ovidiu Nicolescu - CNIPMMR), the frequency of opportunities to access a grant in Romania in 2016 was very low, respectively 13.87% of the interviewed SMEs . The latest Eurostat official data, however, indicates a number of only 3,645 innovative companies active in Romania (compared to 3,764 in Hungary, a country with half our population) out of a total of 380,455 innovative companies in the EU (Eurostat, 2020)

A positive measure with an impact on the competitiveness of the business environment is the measure on Digital Infrastructure - the improvement of the digital broadband infrastructure, the target set in the National Strategy on Competitiveness of 80% by 2020 reached 82% in 2017 (Eurostat, 2019b).

Entrepreneurship, respectively the improvement of the number of SMEs related to the population is another stimulating measure regarding the competitiveness of the business environment, respectively in Romania there are 23 companies per thousand inhabitants and we are the last in the EU in this chapter, far from the target of 36,45. % proposed by SNC for the year 2020. Comparatively, in Bulgaria there are 46 companies per thousand inhabitants, and in the Czech Republic 138 companies (Paul, 2018). According to the White Paper of SMEs, 26.26% of SMEs have been established in the last 5 years, most of the total of SMEs in Romania (34.93%) are concentrated in the Bucharest-Ilfov region, being also the richest region at national level. Moreover, the increase of the contribution of SMEs to the gross added value in Romania in 2017 was only 51.3%, being 26th out of 28 EU countries (Annual Report on European SMEs 2017-2018).

In order to create a sustainable economic environment, together with economic-financial incentives, we consider that another aspect that we should reflect is related to a better employment rate, respectively in 2017 was: 68.8%, at 1.2 percentage points compared to the target highlighted in the CNS of 70%

for 2020. The competitive development of agriculture and rural space could be considered a basic pillar in the competitive development of the real economy, especially in the context that in 2017, the productivity of agricultural work in Romania stood at only 4,380 euros per unit of labor, 4.5 times below the EU average, far from the CNS target to double this indicator by 2020.

A functional relationship between economy, environment and society through the correct and efficient management of consumption sources and their transformation into resources, can ensure the social sustainability of the real economy in Romania and contribute directly to sustaining economic convergence (internal and external convergence).

#### References

- Deloitte. (2018). Deloitte analysis: The minimum wage in Romania compared to the states in Central and Eastern Europe, [online]. Available at:https://www2. deloitte.com/ro/ro/pages/about-deloitte/articles/analiza-deloitte-salariul-minim-in-romania-prin-comparatie-cu-al-statelor-din-regiunea-europei-centrale-si-de-est.html.
- Dumitru, I. (2018). The unobserved economy in Romania causes and consequences. *The Fiscal Council*, Romania, [online]. Available at: http://www.consiliulfiscal. ro/ionut\_site.pdf.
- European Commission. (2017-2018). *Annual Report on European SMEs 2017-2018*, [online]. Available at: https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review\_en.
- Eurostat. (2018). 2018 Regional yearbook. Luxembourg: European Union.
- Eurostat. (2019a). *First estimates of Research & Development expenditure*. [online]. Available at: https://ec.europa.eu/eurostat/documents/2995521/9483597/9-10012019-AP-EN.pdf/856ce1d3-b8a8-4fa6-bf00-a8ded6dd1cc1.
- Eurostat. (2019b). *Enterprises with broadband access*, [online]. Available at: https:// ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=tin00090&language=en.
- Eurostat. (2020). Enterprises by main types of innovation, NACE Rev. 2 activity and size class, [online]. Available at: http://appsso.eurostat.ec.europa.eu/nui/show. do?dataset=inn\_cis9\_type&lang=en.
- Fiscal Council. (2017). Addendum to Fiscal Council's preliminary opinion on the State Budget Law, Social Insurance Budget Law for 2018 and Fiscal Strategy for 2018-2020. Available at: http://www.fiscalcouncil.ro/Opinii2017lbengleza.pdf.
- Fiscal Council. (2018). Analysis of the Economic and Financial Performance of Romania's SOEs in 2017, [online]. Available at: http://www.fiscalcouncil.ro/ SOE%20analysis%202017.pdf.

- Fiscal Council. (2019a). *Annual Report 2018*, Romania, [online]. Available at: http://www.consiliulfiscal.ro/raport2018final.pdf.
- Fiscal Council. (2019b). The impact of changing the tax regime of the Romanian companies' earnings in the period 2015-2018. Romania, Bucharest.
- Medina, L., Schneider, F. (2018). Shadow Economies Around the World: What Did We Learn Over the Last 20 Years? *IMF* Working Paper 18/17.
- Paul, A. (2018). The first independent monitoring of the National Competitiveness Strategy 2015-2020. *INACO*, [online]. Available at: https://inaco. ro/prima-monitorizare-independenta-a-snc-strategia-nationala-decompetitivitate-2015-2020/, revised, completed and updated in March 2019.
- World Bank. (2018-2020). Doing Business 2020: Comparing Business Regulation in 190 Economies. Washington, DC: World Bank, [online]. Available at: http:// www.doingbusiness.org/reports.
- World Economic Forum WEF. (2018). Global Competitiveness Report 2018, [online]. Available at: http://reports.weforum.org/global-competitivenessreport-2018.

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# TERRITORIAL ADMINISTRATIVE UNIT -AUTONOMOUS ADMINISTRATIVE STRUCTURE

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Abstract: The territorial administrative units are complex entities, with diversified organizational structures, within which a set of activities is developed for the elaboration and application of normative acts, methodological norms, regulations and programs, in order to meet the needs, needs and requirements of the local community within which act. The territorial administrative units have legal personality and comprise in their structure deliberative and executive authorities. Their main feature is that they work according to the principle of decentralization, which implies autonomy and the limited transfer of decisionmaking power from central to local level. Local autonomy gives territorial administrative units the right, within the limits set, to have initiatives in all areas concerning the respective local community. The territorial administrative units have their own budgets and have their own patrimony in which the goods belonging to the public and private domain of the county, the municipality, the city or the commune are included. They organize, operate and manage the financial resources and public or private property assets of communes, cities and municipalities, based on the principles of local autonomy, decentralization of public services, eligibility, legality and consultation of citizens in solving local problems of community interest.

**Keywords:** *autonomy, decentralization, influencing factors, strategic planning, public services, territorial administrative unit* JEL Classification: *M40. M41* 

#### Characteristics of territorial administrative units

The territorial administrative units comprise the communes, the cities, the municipalities, the sectors of the Bucharest municipality, the counties, the Bucharest municipality. In the subordination or coordination of the local public entities are the public services of local interest, organized at the level of economic operator, which have the role of realizing and providing public services, which satisfy the interests and needs of the citizens, who compose the local community in which the administrative unit territorial activity (Matei, & Anghelescu, 2009).

The characteristics of the territorial administrative units can be identified as follows:

a) *responsibility towards the citizen* - the territorial administrative units implement the policy of the government in the specific fields of activity, by virtue of the principles of autonomy and local decentralization, being the guarantor of the state at local level and have direct responsibility towards the citizen. Through the provision of public services, I aim to satisfy the needs and needs of the local community in which the public entity operates.

b) *rigidity in setting objectives* - the role of territorial administrative units is established by normative acts and is related to meeting the needs and needs of the local community in which it acts. In this situation, the territorial administrative units have the obligation to act within the established normative framework. They cannot restrict their activities, in cases where they are not efficient or realized under performance conditions, but they cannot extend them outside the limit established by the normative framework or they can be re-profiled.

c) management based on objectives - involves defining the strategic objectives, within the strategies and policies of the entity and deriving them into general objectives and then into specific objectives. This management system ensures the superior use of resources and obtaining performance, but for this must be harmonized: the set of objectives, regardless of the level at which they are defined and the hierarchical level; action programs, which include concrete ways to achieve the objectives; budgets, which approve the resources needed to achieve the objectives; the deadlines for implementing the actions; the methods, techniques and tools used to achieve the objectives. Goal-based management also emphasizes risk assessment and their impact on goal achievement, which is why internal control systems designed and implemented must lead to risk mitigation. d) *the conditions of competition for conducting the activity* - the territorial administrative unit is a provider of public services to the citizens, but the activities carried out for their accomplishment do not subsume the concept of financial profitability, respectively, at present there are no established effective tools for evaluating their own activity and performance measurement. This has repercussions on the efficient use of public funds and ensuring transparency and maintains certain levels of bureaucracy.

e) the election of the deliberative and executive authorities by vote mayors, presidents of county councils, members of local and county councils are appointed following the vote of citizens who are part of the local community where the public entity acts. Under these conditions, there is a close relationship between the public administration and the political environment, with positive or negative consequences.

f) *the authority of the leaders* - the leaders of the local public entities come into contact or work with persons from central authorities and public institutions, with leaders of interest groups, committees, commissions, etc., which can significantly affect their authority.

g) *human resources management* - current regulations in the field of human resources limit the possibilities of the managers of the territorial administrative units to hire, release from positions, sanction or reward.

The dimensioning of the structure of a territorial administrative unit is limited, this is done according to the number of citizens that exist in the area of action of the entity, without taking into account the conditions of technology and the concrete ways of carrying out the activities.

Dismissal or sanction of an employee is subject to the decision of a disciplinary committee. This methodology on the one hand is beneficial because it eliminates the direct possibility of the manager to sanction, in certain cases, persons with whom they conflict or who have opinions on certain decisions, but, on the other hand, the leader of the entity is responsible for achieving the objectives under performance conditions, which is why it has to have, directly, certain levers and tools for achieving the objectives. Also, existing career plans do not motivate employees to use professional skills in the interest of the entity and to make a career in that entity.

h) *measuring the organizational performance* - it involves taking into account the requirements regarding: if it was worked correctly and if it was done the right thing. The first requirement involves compliance with the regulations and requirements of the adopted strategy and operates in accordance with the "good practice" in the field. The second requirement relates to the effectiveness

of the programs, the activities carried out or the responsible functions and the achievement of the established results.

i) *correction against the citizen* - the territorial administrative unit is organized in such a way as to serve the interests of the citizens, but at the same time, it exercises its power and capacity to sanction on the citizen.

These characteristics impose a specific profile for the territorial administrative units and highlight that the efficient and effective functioning represents a managerial responsibility.

The existence of the limitations and structural problems that the territorial administrative units face, is influenced by the organizational culture and determines their leaders to find solutions to the existing problems so that the institutional performance increases.

At the organizational level, the organizational culture is influenced by a number of factors such as leadership style, decision making, organizational form, policies and strategies developed and applied, level of formalism or working environment. Also, the organizational culture is influenced by the aspirations and values system of the organization, by the knowledge and skills of the staff, by the interaction between the employees of the organization, by the goals and interests of the management and the employees. The management of the organization uses the organizational culture in making managerial decisions (Vasile & Croitoru, 2016).

## Delimitations regarding the operating environment of the territorial administrative units

From the analysis of the way of organization and functioning of the territorial administrative units it has resulted that, at present, the best tools for the efficiency of activities are not applied, in areas such as the decision-making process, the establishment of responsibilities and functional relations, the decentralization of the activities, the independence of the budgets, the communication between the public entity and the citizen, as well as the implementation of an integrated information system.

In the current conditions of development of the company, we express our conviction that the complex political, social and economic environment, the structural and organizational changes that took place within the public entities, in the last period of time, have generated a professionalization process of the management in the public entities. The process must continue to involve the selection and attracting of specialized personnel, who have the necessary competences to perform the functions and tasks of the entity and is able to apply modern management methods, techniques and approaches, in order to obtain performance.

In order to obtain performance, it is necessary to establish an adequate organizational structure, to analyze and correctly define the work processes, tasks, tasks, competences and responsibilities of the personnel, as well as to establish clear functional and representation relationships, both inside and outside. entity.

Under the current requirements, the performance of a public entity is determined according to the way in which human, material, informational and financial resources are used to achieve the objectives proposed at the level of performance standards and how they satisfy the public interest, through the services offered. Under these conditions, management's concern is how to manage public resources more efficiently to meet the social needs of citizens who are constantly growing and how to achieve the best level of performance, by ensuring the efficient functioning of the system from which the public institution makes part (Croitoru and Calotă, 2011).

The specific responsibilities established to the territorial administrative units according to the regulations in force and which influence the establishment and achievement of the objectives are:

a) *submission to the rule of law* - the organization and functioning of the entity, the carrying out of activities and actions, as well as the exercise of any function, attribution or task are only made if there is a regulatory framework in force. The methodological and procedural framework under which the activities are carried out is elaborated on the basis of the normative framework, any deviation from these rules leads to attracting the responsibility of the persons concerned.

b) *centralization of power and responsibility* - the power within a territorial administrative entity is concentrated at the top of the entity, where it is decided on the strategy and future development, in compliance with the legislative requirements in force.

The responsibility for achieving the objectives rests with the management, even if it delegates the execution of the activities of the lower levels. Also, the management is responsible for designing and elaborating the internal control system at the level of the whole entity, and the lower levels have the obligation to implement this system in the form decided by the management. Any imperfections are reported, and the top management decides on the systems review.

c) the use of the career system in the recruitment of the personnel - the career system is a rigid one, it does not ensure the co-interest and stability of the personnel on a certain function, there is no system of motivating the personnel, which limits the co-interest in accomplishing the tasks and the use of all professional skills. Also, after a certain period of work, the staff reaches the top of the career system without having a further motivation system.

d) *compliance with procedures and initiative* - the management issues decisions that are applied in the form received by all the hierarchical levels and all the managers. The limitation of the initiative creates a certain rigidity in the accomplishment of the activities, because the lack of the possibility to make decisions, within the limits of the established responsibilities, does not ensure efficiency in the accomplishment of the tasks and reduces the level of performance.

e) the diversification of the role of the territorial administrative units - the needs and needs of the citizens are constantly increasing and diversifying, which require the entity to expand and diversify its activities so as to find solutions to meet these needs. The process is complex, involves the deliberative authority that is responsible for the adoption of the decisions and the executive authority that is responsible for identifying the resources necessary for the realization of the public services requested by the citizens and the implementation of the decisions taken.

f) *budgetary pressure* - budgeting through programs has not yet become a basic tool for the management of territorial administrative units, although the measurement of the degree of achievement of objectives, with the help of defined indicators, is also done in financial terms. Program budgeting plays an important role in ensuring performance. The object of the budget of the program is to establish as rigorously as possible the volume of incomes, their structure by sources and expenditures by destinations.

g) *the technologicalization of the territorial administrative units* - the development of information technology is an essential condition in ensuring the performance and reducing the costs, it allows the reduction of the physical work, the information storage and the achievement of efficient information circuits. The provision of integrated information circuits makes it possible to have complete and updated databases, which can provide information for any field of activity of the entity.

h) *application of good practices* - application of international standards in the field and of good practice is a current responsibility and activity. This facilitates the possibility of applying unitary methodologies for carrying out the activities, preparing reports and providing clear information about the entity and its economic situation.

In these conditions of organization and functioning, the implementation of the performance concept within the territorial administrative units represents a difficult thing to do, considering the difficulties regarding the understanding of the performance concept, the ways in which the performance can be ensured and) the difficulties regarding the establishment. performance measurement criteria, based on performance indicators (Săvulescu, Matei, Anghelescu, 2009).

However, changing the role of the administration in correlation with the needs of the citizens will lead to the need to make changes within the territorial administrative units, based on efficiency, efficiency, responsibility, decentralization, transparency, strategic approaches and quality.

#### Factors influencing the activity of territorial administrative units

The territorial administrative units have established general and specific functions and attributions and on their basis they perform and provide public services, in accordance with the general public need. Public services are financed from public funds and they benefit the entire community in the area where the territorial administrative unit operates.

At the same time, the rules established between the territorial administrative unit and the citizen ensure the identification of the general collective needs and the choice of the most appropriate public services to be provided, however, without the territorial administrative unit taking into account their own interests.

The balancing of collective interests and the provision of public services must take into account the needs of the community, identified by interests, values, concerns or behaviors (Popescu, 2015).

Thus, the greater the collective choices made by the territorial administrative unit in the provision of the public service, the more support the community enjoys, the more they accumulate an increased authority.

The main criteria considered when choosing and providing public services and which may represent values of the public administration sector are the following:

a) clear identification of the needs and needs of the community;

b) establishing a correct relationship with the citizen;

c) responsibility towards the citizen and in carrying out public actions;

d) equal treatment for each citizen, regardless of their status;

e) involvement of the citizen in the decision making by the public entity;

f) appreciation and respect by the territorial administrative unit of its employees, which represents the link between the entity and the citizen.

In our opinion, we consider that, within this system, the human resource is an important, decisive factor, which contributes to the provision of quality public services and in terms of efficiency and effectiveness. Under these conditions, increasing the professionalism and skills of the staff should be a fundamental requirement for the entity.

In the economic thinking and practice of territorial administrative units, several factors that influence the environment in which they operate are distinguished, as follows:

*Technological conditions*, a territorial administrative unit that has integrated information systems and technologies works better and ensures the transparency of activities.

*Legal conditions*, the territorial administrative unit defines its objectives and structures the activity according to the existing legal regulations, which means that, an appropriate regulatory framework is of utmost importance for the public entity;

*Political conditions*, the political environment has an obvious influence on the territorial administrative units, due to the fact that they are led by politicians who are the people's representatives, elected in public functions, by vote. However, politics can also have a negative influence on territorial administrative units, by "politicizing" after each electoral process, on criteria of political belonging and not through competence.

*Demographic conditions*, the structure and characteristics of the community of which the territorial administrative unit is part, have an important impact on the way of organization and functioning of the public administration, as well as the way of structuring;

*Economic conditions*, the activity of the territorial administrative units is influenced by the degree of economic development of the company, respectively by the level and the way of collecting the revenues and by the way of spending the public funds, which can make it or not competitive;

*Cultural conditions* are identified by the perception of the administration by the citizen and his confidence in the authorities.

Considering the variety, volume and complexity of the activities carried out within the territorial administrative unit, we can appreciate that it is difficult to understand and analyze if the environment in which it works is not known (Profiroiu, 2010).

Through its operating mechanisms, the territorial administrative unit has the possibility, by virtue of access to specialized information, to influence the conception of public policies and strategies and thus to develop its own institutional interest.

#### Strategic planning - a factor of progress in territorial administrative units

The territorial administrative unit faces increasingly complex problems, determined by the limitation of public resources and increasing expectations from citizens and the local community, which requires efforts to develop programs and to attract funds in order to achieve and provide the requested public services (Jaliu, 2013). The territorial administrative units tried to establish medium-term development visions, based on which they proceeded to design and elaborate more or less complex development strategies, depending on the objectives pursued. In this strategic development approach, the territorial administrative unit was confronted with a number of problems, as follows:

a) the flexibility and the accomplishment of the strategic changes at the level of the territorial administrative units are limited, being determined by the mission and the purpose of their organization and functioning which are established by legal regulations and from which they cannot be deviated;

b) the time periods established in the strategy for achieving and achieving the objectives are short, being determined by the limitation of the mandate of the leader, who is elected by vote by the citizens of the community and who wants immediate and visible results;

c) the process of establishing and defining the objectives is a complex one, influenced by the political, administrative, interest groups, as well as by the citizen;

d) the lack of professional training programs of the personnel involved in the implementation of the strategy leads to a limited diagnosis of the field, and in conjunction with the insufficiency of the information leads to the incorrect formulation of the strategy;

e) the complexity and variety of activities, as well as the goals pursued by the territorial administrative units make it difficult to measure the results obtained, especially the impact of achieving the strategic objectives on the entity.

Although, there is a risk management at the level of territorial administrative units, risk taking is not a type of behavior encouraged by the management of public entities, in the sense that the managerial responsibility regarding the internal control system is assumed, but the implementation and application, in practice, of these systems is insignificant.

### Conclusions

In the last period of time, the specialists have shown, following the researches carried out that the main objective of the management of the territorial administrative units must be reviewed and oriented towards a system of values, respectively towards the evaluation of the performance. To achieve this objective, the directions of action are: how to manage public resources more efficiently, to meet the needs of the citizens constantly growing and how to obtain the best level of performance, by ensuring the effective functioning of the institutional system of the entity.

The increasing level of public needs as well as the difficulties arising regarding their coverage have required transformations both in the way of providing public goods and services, as well as in the way they are financed. At the same time, the quality of public services has become dependent, among others, on the performance level of territorial administrative units.

The territorial administrative units must respond with efficiency and competence to the concrete, daily problems that the citizens face, in whose service they must put their full concern. Thus, the development tendencies, in order to increase the performance, need to be directed, mainly, towards the integration and the assumption by the leaders of the political decisions taken, the definition and the setting of clear, simple and concrete objectives, the increase of the managerial responsibility, the monitoring of the activities and the obtaining programmed results, evaluation of results by designing and using an appropriate set of performance indicators.

The quality of the activities carried out is decisively influenced by the sufficiency of the material, financial, human or informational resources available to the territorial administrative units. The limitation of the financial resources, an aspect that most of the territorial administrative units face, affects the achievement of the objectives or makes it impossible to carry out activities attached to them.

The approach in the territorial administrative units is a vertical one, in which a person, who has the role of leader, based on the established competences, takes the necessary decisions for all the sectors of activity of the entity. Thus, the lower levels implement the decisions in the conditions in which they received them, and the obtained results are communicated the higher levels and used in the foundation of the future decisions.

The use of this pyramidal model of organization, based on rigidity, has negative consequences for the entity, considering that, an employee who

obtains excellent results and who has high knowledge and skills in the field, they are not used properly and effectively by the management. entity.

In our opinion, the flexibility in the process of corporate governance of the territorial administrative units and the use of personnel thinking and creativity in organizing and carrying out their own activities will lead to essential changes on several levels at the level of the public entity, namely the increase of the organizational performance, the improvement of the mentality and the behavior. staff in the way of exercising their tasks and responsibilities and orientation towards providing quality public services, in accordance with the needs and needs of citizens.

#### References

- Croitoru, I., and Calotă, G. (2011). Performance efficiency in public entities an essential feature. *Finanțe Contabilitate (Journal of Finance Accounting)*, Bucharest.
- Jaliu, D. (2013). *Strategic planning in public administration*. Bucharest: Economic Publishing House.
- Matei, l., and Anghelescu, S. (2009). *Local development. Concepts and mechanisms*. Bucharest: Economic Publishing House.
- Profiroiu, A. (2010). *Basics of Public Administration*. Bucharest: Economic Publishing House.
- Popescu, L.G. (2015). *Public Policies and Governance of the European Union*. Bucharest: Economic Publishing House.
- Săvulescu, C., Matei, A., Anghelescu, S. (2009). *Theoretical and empirical models of local development*. Bucharest: Economic Publishing House.
- Vasile, E., Croitoru, I. (2016). Organizational culture factor of the efficiency of the risk management process. *International Auditing & Risk Management* 2(42): 95-104.

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# THE CHANGING NATURE OF WORK. BRIEF AUDIT OF HUMAN CAPITAL IN ROMANIA

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**Abstract:** The new picture of a person's life in the digital age assumes another philosophy of life, which practically cancels an important sequence with which we were accustomed: the educational cycle, the work cycle and the retirement cycle. The fact that the evolution of the technology will have a major impact on the way there we work and live has become a reality that we cannot longer ignore. More and more studies have lately analyzed the impact that technology will have on jobs in the near future. It is estimated that many of the skills sets associated with the future jobs will contain elements that are not considered "basic" today. There are analyzes that show that more than half of the children who begin their high school education today will have jobs that not currently exist. In these circumstances non-cognitive skills could to help individuals "to adapt better changing work and life environment". It is clear that the future of human resources is a digital one. Which means that the labor market is within a fundamental change. The lack of skills for digital jobs will be a major impediment to the development of many companies in the future. Romania is currently in the top of the countries with the biggest discrepancy between the need for staff and the capacity to fill the vacant positions. Looking from this perspective how prepared is it? Does it have a strategy for the future concerning the development and training of the key personnel to cover the lack of skills *from present?* 

**Keywords:** analytical reasoning, artificial intelligence, cloud computing, critical thinking, DESI, digital skills, labor market, non-cognitive skills, unconventional patterns

JEL Classification: A14, F6, I25, J24

### 1. General context

Beyond the controversies that arise in the public policy debate regarding the changing nature of work and skills it is an undeniable reality that technological changes have given rise to new forms of employment worldwide. Many of these are different from traditional "work". They transform, on the one hand, the traditional relationship between employer and employee, and on the other hand, they are characterized by unconventional patterns and jobs.

According to an analysis on the networking LinkedIn, employers were interested in 2019 of a very interesting combination between the hard and soft skills of the employee, in which creativity is at the top of the desired attributes (Charlton, 2019). Practically, the conclusions were the same with those from the World Economic Forum's Future of Jobs Report (2018), which has concluded that it is not excluded that with the advancement of technology and the automation, the human skills such *originality, initiative* and *critical thinking* grow greatly in value. The specialists argue that a "moderate level of digital skills and strong non-cognitive skills are expected to be required for most jobs in the future".

Figure 1. What are the most important skills for employees to learn from L&D programs?



Source: Charlton, 2019 - LinkedIn Desired Skills

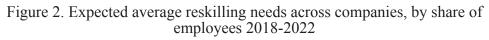
Basically, on the one hand, here are the top 10 skills required by employees in 2019 according to LinkedIn:

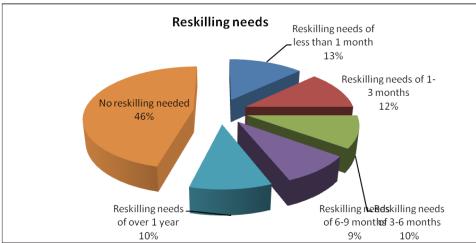
The top 5 <b>soft</b> skills companies needed most in 2019	The top 5 <b>hard</b> skills companies needed most in 2019				
Creativity	Cloud computing				
Persuasion	Artificial Intelligence				
Collaboration	Analytical Reasoning				
Adaptability	People management				
Time management	UX Design				

Table 1. The top skills companies needed most in 2019

Source: Charlton, 2019 - LinkedIn Desired Skills

On the other hand, the data show that there is an increase in the instability of competences due to the technology that changes the profiles of many current jobs for which different skills who are required. Which means that many unemployed people will need significant retraining and improvement in the coming years.





Source: World Economic Forum, 2018 - The Future of Jobs Survey

It should also be emphasized that it is certain that by 2030, according to specialists, about 210 million people worldwide will have to change their occupation and about 800 million workers worlwide will be exposed at risk of labour disruption.

The dynamics of these changes will surely build the following two strategies in the field:

- On the one hand, the education system will try to respond to the future demand for skills, emphasizing rather on equipping people with non-cognitive skills (skills who help individuals to anticipate the change);
- On the other hand, because formal education will probably not be sufficient, the implementation of a lifelong learning approach will become more than a functional requirement.

### 2. Digital Economy and Society Index Report 2019 Human capital<sup>1</sup>

Since 2015 The European Commission has been monitoring the digital competitiveness of each Member State, currently targeting the following areas:

- the degree of readiness for using 5G networks,
- digital skills above the elementary level,
- basic skills in software (at least elementary competencies),
- ICT specialist,
- graduates in the ICT field,
- people who have never used the internet,
- professional social networks,
- taking an online course,
- consultations and online voting,
- online sales by individuals,
- large volumes of data,
- exchange of medical data,
- electronic prescriptions. (European Commission, 2019a)

According to the DESI country reports that combine data from the DESI indicators in the five dimensions of the index with observations on the policies and practices specific to each country, the following observations can be made (see Figure 2, European Commission, 2019a):

- Nordic countries and the Netherlands scored the highest ratings in DESI 2019 and "are among the global leaders in digitalisation";
- United Kingdom, Luxembourg, Ireland, Estonia and Belgium are the countries who closely follow the group of countries with a very high DESI index;

<sup>1</sup> The Digital Economy and Society Index (DESI) is a composite index that summarises relevant indicators on Europe's digital performance and tracks the evolution of EU member states in digital competitiveness

- Even the EU as a whole needs improvement to be competitive on the global stage.
- In this European ranking Romania and Bulgaria occupy the last places and "still have a long way to go".

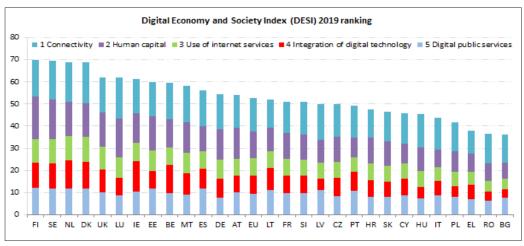


Figure 2. Digital Economy and Society Index 2019 ranking / EU

Source: European Commission, 2019a

### **3.** New forms of employment in Europe

Most of the discussions in the EU regarding the new forms of employment carry the burden of the several fears that in fact means following:

- What needs to be done to reach a more flexible and inclusive labor market?
- What should be the way of legalizing the employment practices that have not yet been declared?
- What needs to be done to ensure a real social protection and sound working conditions?
- How to avoid an unexpected tension created within the process of replacing standard jobs with less favorable terms of employment for workers?

Beyond the size of these debates, it is a certainty that the dynamics in the field are very high, according to specialists at least 9 new forms of employment have already been identified in the Europe countries since 2000 (see Table 2):

- **Employee sharing** practically "an individual worker is jointly hired by a group of employers to meet the HR needs of various companies", that means "permanent full-time employment for the worker";
- Job sharing practically hiring more workers to complete one job together, by combining two or more part-time jobs into a full-time position;
- **Interim management** practically the temporary hiring of highly qualified experts for a specific project or to solve a specific problem (integration of external management capabilities in the organization);
- **Casual work** practically the employer is not obliged to assure work regularly to the employees, but has the flexibility to request them in on demand;
- **ICT-based mobile work** practically the workers can do their job from anywhere at any time, "supported by modern technologies";
- **Voucher based work** practically, the payment of services with a voucher "purchased from an authorized organization that covers both wage and social insurance contributions";
- **Portfolio works** practically a self-employed person who works for several clients in the same time, but on a small scale for each of them;
- **Crowd employment** practically an online platform which replaces the employers and the workers "often with larger tasks being split up and divided among a 'virtual cloud' of workers";
- **Collaborative employment** practically the freelancers, the independent employees or micro-enterprises "cooperate in some way to overcome limitations of size and professional isolation" (Eurofound, 2015).

	Employ- ee sharing	Job sharing	Interim manage- ment	Casual work	ICT – based mobile work	Voucher - based work	Portfo- lio work	Crowd employ- ment	Collabo- rative employ- ment
Austria	Х					Х			Х
Belgium	X			X	X	X		X	X
Bulgaria	X								
Croatia				X					
Cyprus					X		X		X
Czech R	X	X	Х					X	
Denmark					X		Х	X	
Finland	X								
France	X		Х	X	X	X			X
Germany	X				X			X	X

Table 2. New forms of employment identified in Europe countries

Greece	X		Х		X	X	X	X	X
Hungary	Х	Х	X	X	X				
Ireland		Х		X					
Italy		Х		X		X	Х	X	X
Latvia			X		X		Х	X	
Lithuania					X	X	Х	X	X
Luxembourg	X								
Netherlands				X	X		X		X
Norway			X		X		Х		
Poland		Х							
Portugal					X		X	X	
Romania				X					
Slovakia		Х		X					
Slovenia		X		X					
Spain					X			X	X
Sweden				X	X				X
UK		Х	Х	X			X	X	

Source: Eurofound, 2015, New forms of employment

#### 4. Romania – short overview

The world is changing. The new digital technologies will produce substantial changes in people's lives. New patterns of socio-economic life are likely to emerge. More than half of employees worldwide feel threatened by automation. And many more will have to learn new digital skills. How prepared is Romania from this perspective? A comparison between Romania and the EU regarding DESI (Digital Economy and Society Index) identifies some serious issues:

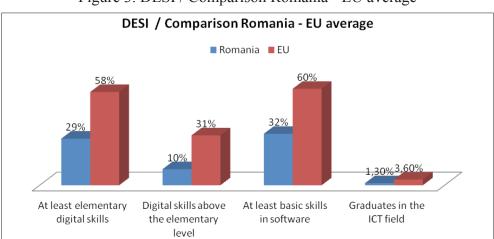


Figure 3. DESI / Comparison Romania - EU average

Source: European Commission / DESI Report 2019

According to the Country Report 2019 Romania is currently ranked 27th:

	Romania / Rank	Romania / Scores	Scores / UE
DESI 2019	27	36,5	52,5
DESI 2018	27	35,4	49,8
DESI 2017	28	32,0	46,9

#### Table 3. Overview of Romania

Source: European Commission, 2019

- Romania has the best results in the "Connectivity" dimension, due to the large-scale availability of high-speed and very high-speed broadband networks (especially in urban areas);
  - But the Romania has ranks 22nd in terms of connectivity, because the progress has been slow;
- The digitization of the economy has lagged behind, given that more than one fifth of Romanians have never used the internet and less than one third have basic digital skills;
- Romania has the worst performance in terms of digital public services among all member states (even if it ranks 7th in terms of the share of e-government users);
- The digital gap between urban and rural areas is very high in Romania;
- In terms of human capital size, Romania ranks 27th among EU countries, well below the EU average. The levels of basic and advanced digital skills remain the lowest among EU Member States (see Table 4).

			EU DESI 2019 Value		
	DESI 2017 Value	DESI 2018 Value	DESI 2019 Value	Rank	
At least elementary digital skills	28% 2015	29% 2017	29% 2017	28	57% 2017
Digital skills above the elementary level	9% 2016	10% 2017	10% 2017	28	31% 2017
At least basic skills in software	30% 2016	32% 2017	32% 2017	27	60% 2017

Table 4. Human capital and digital skills / Romania versus EU

IT specialists	1,9%	2%	2,1%	27	3,7%
	2015	2016	2017	27	2017
IT specialists (women)	1,2%	1,2%	1,3%	16	1,4%
	2015	2016	2017	16	2017
Graduates in the ICT	NA	5,4%	4,9%	(	3,5%
field	2014	2015	2016	6	2015

Source: European Commission / DESI Report 2019/ Romania

Regarding the use of Internet services the picture looks like in the Table 5:

		Roma	nia		EU DESI 2019 Value
	DESI 2017 Value	DESI 2018 Value	DESI 2019 Value	Rank	
People who have never used the internet (% people)	30% 2016	27% 2017	21% 2018	24	11% 2018
Internet users (% people)	56% 2016	61% 2017	68% 2018	27	83% 2018
News (internet users)	63% 2016	69% 2017	69% 2017	24	72% 2017
Music, video and games (internet users)	67% 2016	67% 2016	63% 2018	28	81% 2018
Video on demand (internet users)	6% 2016	6% 2016	10% 2018	26	31% 2018
Video calls (internet users)	45% 2016	53% 2017	51% 2018	15	49% 2018
Social networks (internet users)	74% 2016	82% 2017	86% 2018	1	65% 2018
Professional social networks (internet users)	6% 2015	6% 2017	6% 2017	25	15% 2017
Following an online course (internet users)	4% 2016	5% 2017	5% 2017	23	9% 2017
Consultations and vote online (internet users)	4% 2015	5% 2017	5% 2017	23	10% 2017
Banking services (internet users)	8% 2016	11% 2017	10% 2018	28	64% 2018
Shopping (internet users)	18% 2016	23% 2017	26% 2018	28	68% 2018
Online sales (internet users)	5% 2016	4% 2017	5% 2018	26	23% 2018

Table 5. Use of Internet services / Romania vs EU

Source: European Commission / DESI Report 2019/ Romania

According to Workforce Disruption Index study (PwC, 2019), until 2029 approximately 600,000 jobs in Romania will be affected by technological advancement. More precisely about 275,000 jobs will disappear (from production, agriculture and utilities), while 325,000 will be created (especially in health, education and services). For this to happen, there is a requirement for employees to acquire new digital skills or develop existing ones, adapting them to the new professions.

#### Conclusions

- The current high level of inconsistency of the workforce competencies of the Romanian companies will limit in the following years their innovative capacity;
- To fully benefit from the digital economy, Romania needs to ensure the increase the number of IT specialists and also the training of teachers and the workforce for the new digital era.

#### References

- Charlton, Emma. (2019). "The 10 most in-demand skills of 2019, according to LinkedIn." *World Economic Forum*. [online] Available at https://www. weforum.org/agenda/2019/01/the-hard-and-soft-skills-to-futureproof-your-career-according-to-linkedin/.
- Eurofound. (2015). *New forms of employment*, Publications Office of the European Union, Luxembourg. [online] Available at https://www.eurofound.europa.eu/publications/report/2015/working-conditions-labour-market/new-forms-of-employment.
- European Commossion. (2019a). *The Digital Economy and Society Index (DESI)*. [online] Available at https://ec.europa.eu/digital-single-market/en/desi.
- European Commossion. (2019b). *Shaping Europe's digital future, Digital scoreboard, Romania.* [online] Available at https://ec.europa.eu/digital-single-market/en/ scoreboard/romania.
- Gonzalez Vazquez, I. et al. (2019). *The changing nature of work and skills in the digital age*. Luxembourg: Publications Office of the European Union. [online] Available at: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/changing-nature-work-and-skills-digital-age. DOI: 10.2760/ 679150.
- PricewaterhouseCoopers (PwC). (2019). *PwC's Workforce Disruption Index*, presented on July 2, 2019 at Workforce for the Future. Upskilling for Era 4.0 event.
- World Economic Forum. (2018). *The future of jobs report 2018*. Centre for the New Economy and Society. [online] Available at: https://www.weforum.org/reports/ the-future-of-jobs-report-2018.

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