DOCTORAL SCHOOL OF ECONOMICS AND BUSINESS ADMINISTRATION ACCOUNTING

DOCTORAL THESIS

-SYNOPSIS-

THE ECONOMIC-FINANCIAL CRIME IN ROMANIA WITHIN THE EU CONTEXT

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INTRODUCTION

1. Context

The approach of the subject "The Economical-Financial Crime in Romania within the EU Context", from an economic and also legal point of view, sets out from combining the results acquired from practical reality with the affirmations or invalid affirmations of different scientific researchers as well as with theoretical concepts enunciated by various authors. The history of the occurrence of the economical-financial crime phenomena is well known, nonetheless its current rate, the diversity of its manifestation and its effects are the reasons that led me into choosing this subject for our research.

Throughout time, various scientists elaborated several opinions. One of the most renowned sociologist of time that is Emille Durkheim laid down in his works a series of original ideas regarding crimes. The most known are those referring to a pathological super controlled society and then there would be no more crimes. Another original idea refers to the fact that as birth and death are natural part of society so is crime. The same idea is found in the treaty of theory and criminology policies (Amza, 2002, p.420), regarding to the standardization of the members of a society, even if it is not wished upon nor even possible, that is if all the members of a society have the same values, then theoretically crime would disappear.

The criminology concept reiterated from the point of the Alexandru Lacassagne (Ciobanu, 2007, p.120), remained known in doctrine because of its aphorisms that later became quite famous. This aphorism refers to comparing the germ element that is the killer to the culture bouillon of crime that is the social environment. By this it shows that the germ element has no value all by itself if it does not find the bouillon that makes it ferment and proliferate.

But the practical reality of financial and economic crime confirms and sometimes refutes the hypothesis of various authors. For example, in elaborated studies, (Kirchler, 2007), (Vaithilingam & Nair, 2009), authors considered that it is very difficult to measure a parameter that is unknown or is confidential, as a consequence of illegal activities deployed. From the point of view of the study (Unger 2013); (Ardizzi et al., 2014), these parameters can be more likely to be estimated and measured. But before any measurement can take place, I considered that the economical-financial crime phenomenon (as well the crime phenomenon in general) manifest it-self as an overt or apparent crime and black or occult crime, (Achim & Borlea, 2019); (Ciobanu, 2007).

The economic crime phenomenon is a particular vast and complex field on which various opinions have been expressed in doctrine and literature. Some of these opinions presents punctual analysis mostly regarding the corruption phenomenon, tax evasion, underground economy that crystallize in the last years, nonetheless I did not identify an overall study, analysis or approach that is comprehensive from the point of view of the damage caused. So I considered that the subject although extremely wide and vast, deserves a special attention.

On international level, there is no unitary definition both legally and educationally, adopted by all states regarding economic-financial crime (Leţia, 2014, p. 13). This concept is associated with deeds such as: corruption, theft, deceit, embezzlement, data corruption, electronic fraud, forgery, counterfeiting, hiding or destroying data and documents, money laundering, tax evasion, accounting document offences, rigged bids in public procurement tenders, etc. (Achim & Borlea, 2019, page18). The reason for this lack of unitary definition, from our point of view, should be searched in the evolution of society, where increasingly different forms of such activity are being manifested.

2. Expose of the thesis

The field of the research was oriented towards a practical approach of the subject regarding economic-financial crime in order to better lay out of its resulted and its negative consequence in Romania and in EU. The most important aim is to identify efficient actions as realistic as can be in countering and limiting this phenomenon that tends to be become more and more complex.

A first factor that determined us to approach such a subject were the problems identified in practical reality regarding the damage caused to the national budget as a consequence of committing an offence. Here we refer especially to the economic-financial crime that comprises all the sectors of national economy and a good knowledge of the relations that are identify in the phenomenon of economic-financial crime, can have an important part in the fight against it.

Going through the opinions from literature and doctrine, where I noticed different terms being used such as: economic-financial crime, financial-banking crime, business-related crime, we consider that economic-financial crime committed with intention are acts that affect the social relations developed within the economy, provided for by both criminal law and special laws. By committing those criminal acts one wants to obtain material or financial benefits in an illegal manner. Mostly, several causes of pecuniary or financial damage or non-pecuniary damage, and the latter reduces the trust in the state and its mechanisms.

The economical-costs of the identified offences is being reflected by the apparent discovered damage caused to the consolidated state budget, meanwhile the undiscovered offences, but committed, cause a series of damage known as the underground economy of the state. These two levels constitute the true dimension of real crime that includes the totality of all criminal offences and violations committed in a given social community and over a given period of time. So the concept of the concept of crime includes not only crimes recorded in the statistics of the criminal investigation bodies of the judicial system, but also crime that goes undetected for various reasons (hazard), is causing criminal tendencies to develop, in his opinion (Daneş & Papadopol, 1985); (Ciobanu, 2007, p. 13); (Achim & Borlea, 2019, p. 24).

The theme chosen is also motivated by the desire to contribute to raising awareness of the role that an efficient forensic police could play in countering this current phenomenon that causes considerable damage to the state budget. We consider that new knowledge on the extent and evolution of the phenomenon of economic crime could provide basic support at a theoretical level and at a practical level could be useful for inhibiting, limiting, preventing and even countering the phenomenon of economic crime.

3. The Aim and the Research Questions

Our main purpose is to outline the aspects related to the evolution and level of the phenomenon of economic-financial crime in Romania, and in the European context. These are to be objectively analyzed in the current thesis to see whether the negative effects of this phenomenon, taken into consideration by authors and scientific researchers, are counterbalanced by the efforts made by the justice authorities.

For each individual study in this thesis, we have tried to establish the decisive indicators on the basis of statistical data, resulting from the practical reality of economic crime. In order to structure the paper and to better understand the distinctiveness of each component of economic-financial crime, we set out to answer a series of questions that guided us throughout our scientific approach:

- ✓ What is the level of economic crime in EU countries?
- ✓ What is the level of economic crime in Romania?
- ✓ The damage caused and the economic and financial crime show phenomena of contagion and diffusion inter-counties?
- ✓ In Romania, tax evasion offences are linked to other types of economic and financial crime?
- ✓ What is the level of tax burden in Romania compared to EU countries?
- ✓ How public tax pressure and tax evasion are linked in the European Union?
- ✓ How and in which areas the fiscal pressure (through the level of VAT) relates to the damage caused and recovered, in Romania?
- ✓ How effective is the fight against economic crime and in which areas of economic activity in Romania?
- ✓ Is there a correlation between the effectiveness of measures to counter economic and financial crime and economic and financial crime in Romania?
- ✓ Are there conflicting opinions between specialists of legal and economic fields, over the causes, consequences and measures to reduce economic crime?

4. Research Methods

In order to achieve the proposed aim and to be able to answer the questions raised in this paper, we considered appropriate to use both qualitative and quantitative methods.

Thus, in order to objectively measure the phenomenon of economic-financial crime in Romania and in the European context, we had the opportunity to use the qualitative research method, in order to understand its dimension and direction. We also focused on using the same qualitative research method to find out the influence of the variation of the tax burden in Romania on the fields of activity of the national economy.

Quantitative models focus mainly on identifying correlations between economic and financial-crimes and tax evasion offences, identified and recorded at national level. At the same time, the same quantitative methods were used to establish the existence of a relationship between the volume of economic and financial crime and the effectiveness of measures to prevent and counter it, as well as to find out what national specialists think about the cause of the phenomenon. Several analytical tools were used (regressions, statistical functions, descriptive methods, analyses and syntheses, correlation matrices, pivot tables, country ranking tables, maps).

A comparative approach was also used, both between EU countries and between Romania's counties, in terms of the typology of crimes, over different time intervals, in order to be able to make predictions about the evolution of future events.

5. Organization of the Doctoral Thesis

The present study is structured over five chapters.

The first chapter: Economic-Financial Crime. Theoretical and Methodological Approaches - is dedicated to reviewing the literature on the phenomenon of economic-financial crime. The theoretical framework and the basic components of economic and financial crime, corruption, fraud, the underground economy, tax evasion, money-laundering and organized crime are discussed in order to see how they are interconnected. This presentation was made in order to get as complete a picture as possible of what the literature has to offer on economic and financial crime.

The second chapter: Systemic Analysis on Economic-Financial Crime - in this chapter we considered that the phenomenon of economic-financial crime could be identified and quantified, through a global approach at the EU level but also at the country level and through an analytical approach in Romania's counties, by measuring the amount of damage caused to the state budget as a result of criminal acts committed.

In doing so, we used three indexes from the literature. To measure corruption, we took into account the most widely used and recognized surveys of public perception of the level of corruption produced by Transparency International *Corruption Perceptions Index* (CPI) and *Global Corruption Barometer* (BCG). For the measurement of the underground economy, we have considered estimated measures of the size of the underground economy calculated as a percentage of GDP. If we refer strictly to the measurement of tax evasion, the literature (Hanlon & Heitzman, 2010; (Tandean & Winnie, 2016); (Hassan et al., 2017); Achim & Borlea, 2019, p.68, 2020, p. 35) *indicate the following indicators as the most commonly used to measure tax evasion*1,2:

- a) *Effective tax rate (ETR), defined* in accordance with US Generally Accepted Accounting Principles (<u>US GAAP</u>) as total tax expenditure (both current and deferred tax expenditure) reported to gross profits (Hassan et al. 2016, Hanlon & Heitzman 2010; Tandean & Winnie 2016);
- b) Cash effective tax rate (CETR), is calculated as the ratio of taxes paid to gross profits. According to Dyreng, Hanlon and Maydew (2010), the ETR indicator reflects tax practices that reduce tax expenditures for financial reporting purposes and the CETR reflects those that reduce actual taxes paid in cash.

The third chapter: Economic-Financial Crime Parameters - contains a summary of the causes mentioned by the general approaches to economic-financial crime identified in literature, such as: Economic development; Technological degree of the economy; Globalization; Legal system; Education; Public governance; Fiscal pressure; Socio-cultural factors. Among the issues that fall within the field of economic-financial crime that we set out to analyze, there is the measurement of tax pressure in EU member countries, the relationship between tax pressure and tax evasion based on an empirical study conducted for EU countries and the influence of VAT tax pressure on economic-financial crime in Romania.

The forth chapter: Countering Economic-Financial Crime - According to this chapter, a ranking has been made of the measures taken to reduce and counter economic-financial crime, with the purpose to deterrent people from committing such crimes.

With this chapter, we wanted to show as much as possible the effectiveness of measures to prevent and counter economic-financial crime in Romania. The other two objectives presented are to analyze the relationship between the volume of economic-financial crime and the effectiveness of measures to prevent and counter economic-financial crime in Romania, as

¹ In the international literature the term use is tax avoidance.

² For a more detailed presentation of the tax evasion measures we recommand Gebhart (2017), Measuring Corporate Tax Avoidance – An Analysis of Different Measures Markus Sebastian Gebhart, Junior Management Science 3 (2017), p. 43-60

well as the opinion of Romanian market players on the problem of economic-financial crime, by carrying out three case studies.

The study concludes with Chapter 5, which contains General Conclusions from the Thesis Studies, Own Contributions and Research Limits.

SUMMARY CHAPTER 1: ECONOMIC-FINANCIAL CRIME. THEORETICAL-METHODOLOGICAL APPROACHES

In this first chapter we presented the basic concepts of economic-financial crime and its classifications. We were draw attention by the areas of its manifestation including: the financial-banking sector (card fraud, bank account fraud, illegal crediting etc.); trade sector (use of shell companies, trafficking and smuggling of cigarettes, alcohol etc.); company sector (fraudulent bankruptcy, misappropriation of funds from the company in various forms); economic and social sector (human trafficking, prostitution, pimping, drug trafficking; gambling; undeclared work etc.); IT sector (theft of personal data, cyber-attacks etc.),

In terms of the direct impact on its assessment, we have highlighted how crime is classified: in *noticed* (i.e. crimes recorded, brought to justice and prosecuted) and *unnoticed* (*unregistered*) or *black crime*, which refers to unrecorded and therefore undiscovered and unprosecuted crimes, which is assumed to be much higher than recorded, discovered and prosecuted crimes.

As is well known, the development of economic and social life is often jeopardized by the quantity and complexity of fraud committed, and public institutions on the one hand are those that ensure the efficiency and effectiveness of justice and conflict solving. On the other hand, they are tasked with strengthening the competitiveness of industry in the market for goods and services.

SUMMARY CHAPTER 2: SYSTEMIC ANALYSIS OF ECONOMIC-FINANCIAL CRIME

In this context, in this chapter we have proposed four objectives, which aims to measure economic-financial crime and the relationships that are identified within the phenomenon of economic-financial crime, both internationally (European) and nationally, investigating the connections between tax evasion and other economic-financial crimes.

2.1. Case study. The level of economic and financial crime in EU countries

Research objective no. 1. The level of economic and financial crime in EU countries. The review period is 2005-2020 and is carried out in 27 EU countries

Corruption (C from "Corruption"), we used Corruption Perception Index which aggregates data from various surveys on perceptions of corruption in the public sector in different countries of the world.

Shadow economy (S from "shadow economy"), we used the data base developed by Schneider (Medina & Schneider, 2019), in which the dimension of the shadow economy is calculated as a percentage of official GDP for 158 countries since 1991.

Money laundering (L from "money laundering"), we use the Basel AML (Basel Anti-Money Laundering Index) score, that measures the risk of money-laundering and terrorism financing in over 129 countries worldwide. Basel AML score is calculated since 2012.

2.1.1. Outcomes Obtained

In this study, the results are in line with those obtained by the European Commission (2013) in the ECOLEF Project, that identify developed countries such as Luxembourg, UK and other Western European countries as having high levels of money laundering, the causes of

which can be sought among the high rate of financial market sophistication, economic growth reflected as GDP/capital, but also cultural influences (Achim & Borlea, 2019, p.84).

The results of this study also reveal that the highest levels of corruption and the shadow economy are found in Southern, Central and Eastern European countries, while Western European countries have the lowest level of shadow economy, followed by Northern European countries. However, if we consider money laundering offences, the results obtained differ somewhat from those obtained for corruption and the underground economy.

Thus, our results show that the countries with the highest levels of money laundering risk are Luxembourg, Greece, Italy, Germany, while the lowest levels of money laundering risk are in Finland, Latvia Estonia, Slovenia and Lithuania. In other words, we see that highly developed countries of the European Union are at the same time facing high risks of money laundering, which brings a certain specificity to these types of crime compared to others.

2.2. Case study. The level of economic-financial crime in Romania

Research objective No 2. The level of economic-financial crime in Romania
The period of analysis is 2005-2019

Corruption (C from "Corruption"), the corruption index reached values between 55-85 % in Romania during 2005-2019.

Shadow economy (S from "shadow economy"), as a percentage of Romania's GDP, the underground economy recorded values ranging between 23%-31% in the period analyzed.

Money laundering (L from "money laundering"), The Basel AML score is calculated from 2012, the first year this indicator was reported by the Basel Institute on Governance. The money laundering risk scores range between 4 and 5, the period analyzed 2012-2020.

In this study, economic-financial crime in Romania was analyzed from a global approach, seen through the evolution of the level of corruption, money laundering and the underground economy.

2.2.1. Outcomes obtained

We consider that since 2005 there has been a downward trend in corruption offences and the underground economy. However, the money laundering risk shows a rather differentiated evolution, which slightly decreases until 2016 and then slightly increases until now.

2.3. Case study. Economic-Financial Crime Level in Romania

Research objective no 3. The level of financial and economic crime in each county in Romania, analyzed in terms of the damage caused and the extent of financial and economic crimes in total offenses. The period of analysis is 2010-2019

This study was carried out through a geographical assessment at county level, in terms of the ratio of economic-financial crime to overall crime, together with the damage caused, over a period of 10 years. A specificity of geographically based methods is the fact that they allow the characteristics of the variables analyzed to be visualized on maps.

2.3.1. Analysis of economic-financial crime when measured by the volume of damage caused

The first step in the analysis of economic-financial crime is carried out by measuring
the amount of damage caused, determined at the time of the end of the criminal prosecution as
a phase of the criminal process, carried out by the criminal investigation body. We would like
to mention that this scientific work includes the damages reported by the County and Bucharest
Police Inspectorates, Economic Crime Investigation Services, excluding the damages detected
and recovered related to other police structures or institutions with control attributions in the

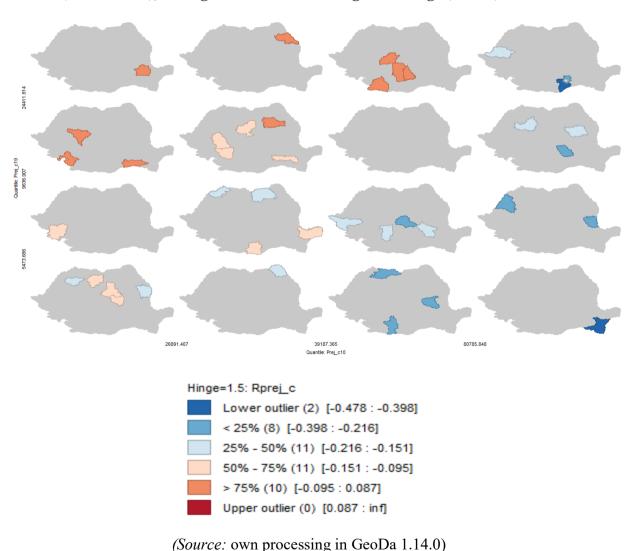
economic-financial field. In this respect, we have carried out an analysis of the amount of damage caused at county level using a descriptive assessment based on maps. These can reveal spatial clustering or polarization processes, as well as the existence of contagion and diffusion processes at county level from this point of view.

But regardless of quartile group, most counties saw significant decreases in damage over the evaluated 10 years.

The conditional map, Chart no 1, shows a diagonal grouping of counties in terms of value. Thus, the counties with the highest rates of decrease had, by preference, high values of damage caused in 2010 and the lowest values of damage in 2019. The results of the descriptive analyses in the quartile-based maps do not show significant contagion and diffusion processes, and no particular geographical arrangement of values is observable.

However, the mostly downward trend over the last 10 years could be based on a process of convergence in terms of the effectiveness of preventing and countering economic-financial crime. Therefore, in the further analysis we have used geographical autocorrelation and regression analyses.

Chart no. 1: Conditional map: damage caused in 2010 (horizontal axis), damage caused in 2019 (vertical axis), average annual rate of change of damage (colour).



The analyses carried out revealed the lack of a diffusion and contagion process at county level, but confirm the existence of a significant process of convergence towards a

common equilibrium, i.e. the counties of Romania tend, over time, towards a common state of equilibrium in terms of damage caused

Conclusions

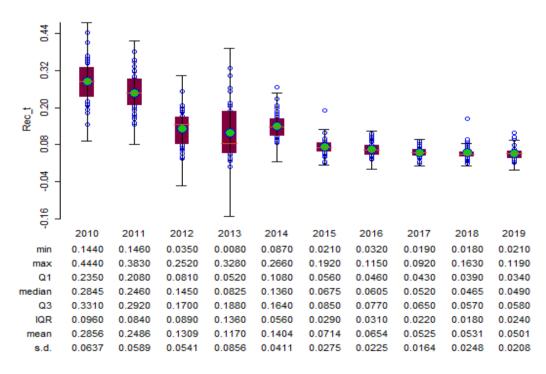
It can be observed that the amount of damage recorded at county level is not influenced by the neighborhood and interactions with neighbors, moreover, we consider that the mostly downward trend over the last 10 years could be based on a convergence process, in terms of efficiency in preventing and countering economic-financial crime. Another point of view is to maintain a modern, stimulating tax policy without increasing existing taxes. Another point of view would also be the improvement of tax administration characterized by the following values: greater transparency in relation to existing online applications, equal treatment of taxpayers in relation to improved quality with citizens, services tailored to their needs, responsibility of employees to the objectives of the National Tax Administration Agency. It is also worth mentioning the continuous improvement of the legislative framework in order to meet the criteria of harmonization of EU legislation.

2.3.2 Analysis of economic-financial crime when measured by the share of economic-financial crime in overall crime.

In the present research, we focused on assessing the issue of economic-financial crime. Therefore, we have dedicated the following section to the analysis of the share of economic-financial crimes in overall crimes recorded annually at county level from 2010 to 2019.

As a first step we used descriptive analysis.

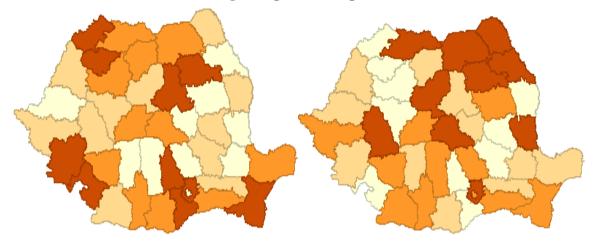
Chart no. 2: Box-plot and descriptive statistics at annual level over the period analyzed

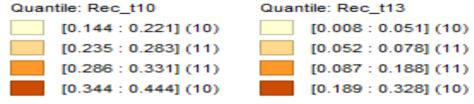


(Source: own processing in GeoDa 1.14.0)

Chart no 2 shows that, at national level, the change in the share of economic-financial crime in overall crime has decreased over time.

Chart no. 3: Geographical distribution of the share of economic-financial crime in overall crime in 2010 (left) and 2013 (right) - quartile map

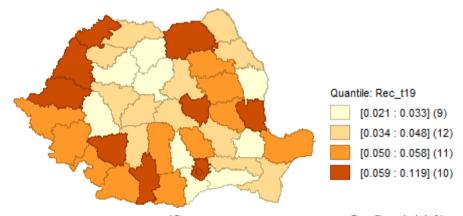




(Source: own processing in GeoDa 1.14.0)

In 2010, there is no geographical arrangement of counties according to the share of economic-financial crimes in overall crimes (chart no 3). 2013, the year with the highest variation, there is a clustering in the northern, north-eastern part of the country, with Maramures and northern Moldova counties with the highest values (chart no 3), and in the western and north-western part of the country, the counties with low values. At the end of the period analyzed, a change in the geographical arrangement is observed. The counties with a higher share of economic-financial crime are now those in the west of the country (chart no 4). Apart from Suceava, none of the other counties in this area remained in the high group. There is more of a center-periphery arrangement, with counties in the center of the country having lower percentages.

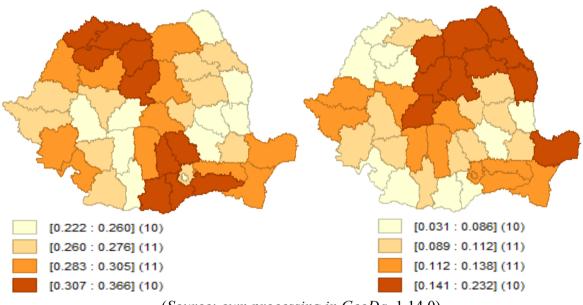
Chart no. 4: Geographical distribution of the economic-financial crime in overall crime in 2019 - quartile map



(Source: own processing in GeoDa 1.14.0)

The large variation since the beginning of the period under evaluation required the introduction of geographical weighting into the analysis. Thus, we constructed the same quartile-map, but geographically weighted for each of the three years analyzed above. Geographical weighting takes into account the neighborhood pattern and the interferences that might occur between neighbors, mitigating the negative impact of value heterogeneity.

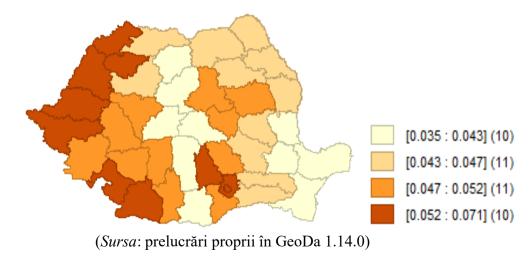
Chart no. 5: Geographical distribution of the share of economic-financial crime in overall crime in 2010 (left) and 2013 (right) - geographically scaled quartile map



(Source: own processing in GeoDa 1.14.0)

The introduction of geographical effects through the process of geographical scaling of the weights calculated annually reveals much clearer processes of value grouping in territory. Moreover, the clarity of these groupings increases over time (see Charts no 5 and 6). Thus, there is a shift in economic-financial crime from the center-north and the area around the capital (2010), towards the northern part of Moldova and the eastern part of Transylvania (2013) towards the western border of the country (2019).

Chart no. 6: Geographical distribution of the share of economic-financial crime in overall crime in 2019 - geographical scaled quartile map.



We can, therefore, consider that in the case of the importance of economic-financial crime in overall crime at the county level in Romania, a process of contagion and diffusion is occurring during the period under analysis.

Conclusions:

In terms of the damage caused, we cannot speak of a process of contagion and diffusion, but from the point of view of economic-financial crime in overall crime at county level, it can be seen that there is a process of contagion and diffusion, which indicates that the mechanisms of crime or actions taken are learned in small social groups, through the transmission of patterns or through the method of conceptual maps, procedures or preconceptions.

Regarding the movement of economic-financial crime from the center-north and the area around the capital in 2010, towards the northern part of Moldova and the eastern part of Transylvania in 2013 towards the western border of the country (2019), we believe this trend is likely to be linked to technological developments given the increased activity and increasingly elaborate fraud schemes in these areas. Also, the right to free movement of goods, services and persons within the European Union, as well as the opportunities offered by economic globalization and today's modern technologies have created new opportunities for crime environment. As can be seen, the criminal environment is expanding its areas of activity as well as its reach, becoming more and more organized and internationalized across borders, with criminal acts clustering in the western part of the country and around the capital.

The descriptive assessment and the assessment based on geographical interdependencies revealed significant contagion and diffusion processes in terms of the share of economic-financial crime in overall crime. Moreover, a significant decrease has been observed over time for the whole country.

Thus, the counties are beginning to show similar behavior, increasingly similar proportions of economic-financial offences in overall offences, which implies that in this case too we can talk about a process of convergence, a process that can be related to the parties involved, all tending towards a common goal, namely to gain an advantage by evading fiscal obligations.

In conclusion, as taxpayers increasingly allow themselves to be influenced by each other to adopt evasive behavior, there is a risk that this contagion will increase and spread.

Preventing and countering tax evasion should be aimed at taxpayers who, by their behavior, not only damage the interests of the tax authorities and do not comply with their obligations, but also develop an unfair competition factor in the sector in which they operate and in the economy. The most appropriate attitude towards this phenomenon is to manage it well, to keep it at a certain level in order to prevent its spread.

2.4. Case study. The relationship between tax evasion and other economic-financial crimes, at county level in Romania.

Research objective No 4. The relationship between tax evasion and other economic-financial crimes, at county level in Romania. The period of analysis is 2010-2019.

Furthermore, through this study, we have analyzed the characteristics of economic-financial crime, at the level of Romanian counties, through the perspective of tax evasion crimes, in relation to other economic-financial crimes.

Further in this study *dynamic analyses, geographical analyses and empirical analyses* were conducted. The analysis of the links between tax evasion and selected economic-financial crimes produced the following results:

- There is a statistically significant link between tax evasion and forgery even at the 1% critical threshold (99% confidence level). In each of the 10 years analyzed, the two types of economic-financial crime are positively correlated, with medium or high intensities. A high number of tax evasion offences is accompanied by a high number of forgeries.
- The same type of relationship, with the same very high level of significance, is also revealed in relation to money laundering. The exception is in 2013 when there is a lack of correlation between the two at county level.
- There is a lack of connection between evasion and corruption, the probabilities obtained being much higher than the standard thresholds used. The exception is 2016, when a significant, direct correlation of medium intensity is revealed.
- In the first part of the period analyzed (the first 6 years), tax evasion and tax code offences are significantly correlated, either at the critical threshold of 1% or 5%. The correlation is direct and of medium intensity, but the coefficients have lower values than for counterfeiting or money laundering. It is interesting, that starting from 2016 onwards, this link disappears, with the correlation coefficients obtained having lower and lower values over time, tending towards 0.
- As far as customs code offences are concerned, there is no specificity to the relationship under analysis. Thus, in 2010, 2011, 2013 and 2018 the link is statistically insignificant. In the years 2012, 2014 2017 and 2019 a significant, direct and medium strength correlation is shown. A high volume of tax evasion is correlated with a high volume of customs code offences.
- The total lack of connection appears in relation to the forest code. In none of the years analyzed is there a significant correlation between the two volumes of economic-financial crime.

The conclusions of this study highlights that tax evasion offences correlate positively with counterfeiting offences as well as money laundering offences. A high number of tax evasion offences is accompanied by a high number of forgeries and a high number of money laundering offences. An interesting result is that we do not identify significant links between evasion and corruption and between evasion and forest code offences.

We appreciate the fact that at the academic level, new knowledge on the extent and evolution of the phenomenon of economic crime will be brought and at the level of the authorities, the results obtained from the current research could be used to inhibit the phenomenon of economic crime by applying new dynamic and effective measures.

SUMMARY CHAPTER 3: FACTORS OF ECONOMIC-FINANCIAL CRIME

In chapter three, we have attempted to discuss issues related to economic-financial crime and explicative factors, which are widely debated in the literature, through three proposed research objectives.

3.1. Case study. The level of fiscal pressure in European Union countries.

Research objective No 5. The level of tax pressure in EU countries, analyzed period 2005-2018

In order to measure the level of tax pressure, we took into account the following parameters: tax pressure related to taxes, tax pressure related to social contributions and total tax pressure (both on taxes and social contributions), and we used descriptive methods, comparison, analysis and synthesis.

When is analyzed the tax burden in relation to taxes, it varies widely, from a low of 17.4% (Slovakia) to a high of 46.2% (Denmark). The countries with the highest levels of tax burden

are Denmark (46.2%) followed by Sweden (36.6%), Belgium and Finland (with approx. 30%), Italy and France (with approx. 28%). At the other end of the scale, the countries with the lowest tax burden are Slovakia and Lithuania (at around 17%), followed by Romania (18.1%), the Czech Republic and Spain (around 19.2%), Latvia, Estonia, Poland and Bulgaria (around 20%).

We can see that among the countries of the European Union, Romania ranks third among the countries with the lowest tax burden. With regard to the average evolution of the level of the tax burden related to taxes and duties at EU level, it can be observed that the highest average value of the tax burden exerted by taxes and duties is towards the end of the analysis period of 26.79% in 2018. Respectively, the lowest average value of the tax burden related to taxes and duties of 24.76% was recorded in 2009. The average level of the tax burden in the EU 27 fluctuates until 2009, after which it increases from 2010.

Regarding the evolution of the tax burden on taxes and contributions in Romania in the period 2005-2018, we also note very large fluctuations from one year to another, ranging from a minimum of 16.2% in 2009 to a maximum of 19.9% in 2015. In 2018, Romania has the lowest level of tax burden on taxes and contributions among the European Union countries, namely 15.42%, followed by Lithuania with 17.21%.

The analysis of tax burden related to social contributions

An analysis of the tax burden on social security contributions reveals very wide variations between countries, ranging from a low of 1.2% (Denmark) to a high of 18.3% (France). We note that the highest levels of tax burden related to social contributions are recorded in France (18.3%), followed by Germany and Belgium (16%), Slovenia (15%), the Czech Republic and the Netherlands (14%). At the other end of the scale, the European Union countries with the lowest levels of tax burden on social contributions are Denmark (1.2%), followed by Sweden (3.4%), Ireland (5.3%), Malta (6.8%), Bulgaria and Cyprus (7%), Latvia (8.7%), followed by Romania (9.4%). Romania ranks in the top seven countries with the lowest levels of tax burden on social contributions. Denmark, despite having one of the highest tax burdens on taxes in the EU27, has one of the lowest tax burdens on social contributions.

As far as the average tax burden on social contributions is concerned, the European Union (EU27) shows insignificant movements from year to year, with an average level of around 14%. In the case of Romania, the tax burden related to social contributions is below the EU27 value in all years of analysis, the lowest value being observed in 2015 of 8.1% and the highest value of 11.4% in 2018.

We observe a general downward trend in the tax burden related to social contributions until 2016, after which we see a systematic increase in the tax burden of this type from 8.1% (2015) to 8.8% (2016), 9.4% (2017) and 11.4% (2018). This increase is mainly due to the increase in the percentage of social contributions during this period.

Total tax burden analysis

In the following, we have highlighted the distribution of the total tax burden, averaged over the period 2005-2018 for EU countries. We can see very large variations between countries, ranging from a minimum of 24.9% (Estonia) to a maximum of 47.3% (Denmark). The highest levels of total tax burden (calculated on both taxes and social contributions) are recorded in Denmark (47.3%), followed by France and Belgium (46.3%), Austria and Finland (42.3%), Italy (41.7%), Sweden and Germany (40%). At the other end of the scale, the EU countries with the lowest levels of total tax burden are Estonia (24.9%), followed by Romania (27.5%), Ireland, Bulgaria and Latvia (28-29%) and Slovakia (30%).

We note that, in terms of total tax burden, Romania is among the countries with the lowest levels of tax burden in the European Union, ranking second with an average level of 27.5% for the period 2005-2018, after Estonia (with 24.9%).

Regarding the evolution of the tax burden in Romania compared to EU countries, we can see that the average level of total tax burden in the period 2005-2018 for EU countries is around 35-36%, with extremely small fluctuations from year to year. Romania records over the entire period under review a total tax burden well below the EU average, ranging from about 25-28%. Over the period 2005-2018, we see quite fluctuating values of the tax burden. Thus, for the period 2005-2009, we find rather high values of the tax burden in Romania, with a general downward trend from approx. 28% (2005) to approx. 25% (2009), after which in the period 2010-2015, we find a slight upward trend of the total tax burden, around the values of 27-28%. In the following period 2015-2018, we can observe a decreasing trend of the total tax burden, around 26%, while the gap with the EU average values is increasing.

3.1.1. *Outcomes*:

In conclusion, the analysis carried out on the structural components of the overall tax burden, for the same sample and the same analysis period, revealed the following features of European tax systems:

- ➤ the average value of the tax burden related to duties and taxes fluctuates over the analysis period between 24.76% and 26.79%;
- ➤ the average tax burden on social security contributions fluctuates over the same period between 13.73% and 14.44%;
- > the overall average tax burden of the Community group ranges from 29.11% to 41.10%.

3.2. Case study. Investigating the relationship between tax pressure and tax evasion

Another objective of the research is to investigate the relationship between tax pressure and tax evasion based on an empirical study conducted for European Union countries.

Research objective No 6. Investigating the relationship between tax pressure and tax evasion, 27 EU countries, analyzed period 2005-2018.

We propose to measure the tax burden using the total tax burden, determined as the ratio of tax revenue (which includes indirect and direct tax revenue and social contributions) to Gross Domestic Product. Information sources are Eurostat databases.

The level of tax evasion is determined as a percentage of GDP, as provided by Medina and Shneider (2018), in studies measuring the underground economy, where the underground economy is measured as the volume of tax evasion

3.2.1 Outcomes and Conclusions

The above estimates provide some indication of an indirect relationship between tax pressure and tax evasion, but not statistically significant. This means that when the tax burden increases, the level of tax evasion decreases. The result is surprising because it does not meet our expectations. Naturally, we would expect the level of the underground economy to increase as a result of the increased tax burden. However, similar results are obtained by other studies such as (Calderwood & Webley, 1992); (Kawano & Slemrod, 2016), (Achim, Borlea, Găban & Cuceu, 2018). The results of these studies show either no negative influence of the tax burden on the level of the underground economy, no link or a positive link. As (Schneider et al., 2010) assess, the explanation for these results that contradict expectations could be related to the different way of measuring the tax burden for each country.

In this respect, the authors note that tax and social security systems are very different across countries and this could be one reason for such different results across studies.

It is precisely for this reason that we set out to investigate the impact of changes in VAT rates on economic-financial crime in Romania, through the perspective of the damage caused and recovered, the significance on their value, both in the short and long term.

3.3. Case study. The influence of VAT tax pressure on economic-financial crime in Romania.

Research objective No 7. The influece of VAT tax pressure on economic-financial crime in Romania, between 2011 and 2019.

Researchers have considered that changes in VAT rates, as a result of tax policy, can lead to consumption being influenced by adjustments in the prices of goods, with a direct impact on the future tax base (Barrell & Weale, 2009). In some cases, increasing VAT rates may encourage tax evasion by reducing at minimum the sales, which can lead to reduced VAT collection. (Matthews & Lloyd-Williams, 2001). Measuring the effect of VAT evasion can be done by using the indicator VAT gap, the difference between the VAT collected and the presumed theoretical amount of VAT to be collected. (Gebauer et al., 2007).

The VAT deficit ratio is used to assess the effectiveness of VAT application (Shuvaieva et. al, 2015). Actually, the VAT deficit provides an estimate of the loss of revenue recorded by the tax authorities due to various forms of tax evasion and fraud, which have the effect of reducing the development of a country's economy and other causes that have a negative impact on the budget cash in VAT.

In Romania, the unique tax - before 1989, the cumulative tax - in the period 1989-1993 (tax on the circulation of goods) and the value added tax - after 1993, during which time there were countless changes in the rate.

Since the introduction of value added tax in Romania (the 1st of July 1993) and up to now, the following VAT rates have been recorded, listed in ascending order of their size: 0%; 5%; 9%; 11%; 18%; 19%; 20%; 22% and 24%. The VAT rate of 24%, applied in Romania between the 1st of July 2010 and the 31st of December 2015, was among the highest standard VAT rates in the European Union (EU), respectively after Hungary with a rate of 27%, Denmark and Sweden with a rate of 25%, taking into account that the average standard VAT rates in EU member states range between 18% and 21%..

The study of the influence of changes in VAT rates, over a certain period of time, longer or shorter, on the losses established and recovered to the national budget as a result of the commission of economic offences requires detailed analysis, as this will reveal the main areas of activity vulnerable to fraud as a result of changes in VAT rates. More accurately, it can show whether the change in VAT rates had a significant positive or negative influence on the damage recorded compared to those recovered. *Knowing the impact of these changes is important for the development of a prosperous economy, and underlines the effectiveness of state intervention in economy. It also makes it possible to identify which primary, secondary, tertiary or quaternary sector of the economy has been affected by this change in VAT rates, in terms of damage, and whether there has been an increase or decrease over the period analyzed.*

The 17 domains of activity, selected for analysis, are relatively restrictive, compacted, according to the type of economic-financial fraud, illicit activities and operations carried out by criminal organizations, chosen on the basis of statistical data provided by the County Directorate of Operational Records and Criminal Records Bucharest. The same approach was also applied in terms of the amount of damage determined both in the caused version and in the recovered version, in accordance with the law, at the end of the criminal prosecution as a phase of the criminal process, carried out by the criminal investigation body.

We would like to mention that this paper includes the damages reported, by domains, by the County and Bucharest Police Inspectorates, Economic Crime Investigation Services, from 2011 to 2019, and excludes damages recorded and recovered related to other police structures or institutions with control attributions in the economic-financial field.

This analysis is focused on the impact of changes in the VAT rate on the two types of damage.

3.3.1. Conclusions

We estimate that a change in VAT leads to an average decrease of 26.4% in the damage caused. But, as mentioned above, the VAT changes recorded during the period under analysis represent only decreases. Implicitly, we can conclude that a decrease in VAT leads to a decrease in the amount of damage caused.

The same type of relationship has been achieved, in the short term, in the case of recovered damage, but the impact of the VAT decrease is more pronounced, respectively of 32.4%.

In the further analysis, we turned to measuring and assessing the long-term relationship between changes in VAT and the amount of damage. We conclude that a decrease in VAT will, in the long term, have the effect of decreasing both the damage caused and the damage recovered. Thus, the decrease in tax pressure leads to a decrease in damage, otherwise said the intention to defraud diminishes.

As a corollary to what has been analyzed in this study, we conclude that the changes in the VAT reduction have significantly influenced both the damage caused and the damage recovered, leading to a diminution in the following areas: Public Administration, Customs Fraud, Labor Protection, Health, Public Acquisition and Tourism.

- VAT cuts have led to significant increases of damage in the case of: Recyclable materials.
- The decrease in VAT has led to significant decreases in damages caused, but not in damage recovered, for: Agriculture and land, Alcohol, Food industry, Energy and excisable products.
- VAT changes have not had an impact on the rate of increase of damages caused in Construction, Financial Crime, but have led to increases of damage recovered.
- There has been an increase of damage caused in Transport, road infrastructure, but no effect on that recovered.
- No link between VAT and any of the types of damage for: Gambling, Environmental Protection, Forestry and Tobacco.

The main contribution of this analysis is to assess the influence of VAT variation on the long and short term damage to the national budget as a result of economic crimes. Therefore, it can be seen that the VAT decreases achieved during the period under consideration had a significant impact on both types of damage, in the way that they diminished. The impact of the decrease in the VAT rate is not only evident on short term but also on long term. We conclude that the decrease in the fiscal pressure of VAT has led to a decrease in economic-financial fraud intentions, estimated by the amount of damage caused and recovered.

Secondly, our analysis provides information and clarifies, how exactly the damage in different domains of activity has changed. The findings are important for policy makers so that they can include measures to prevent and counter crime. At the same time, it highlights the domains of activity where there have been significant increases in damage, at a time when the VAT rate fell. It is thus possible to predict in which direction additional clarifications should be adjusted to the accounting system. Our research has some shortcomings. One of these is the small sample size, due to the lack of reliable data on damage caused and recovered held by

other tax control authorities. In this case, only the amount of damage recorded at the time of the end of the criminal prosecution, as a phase of the criminal process, carried out by the criminal investigation body, by domain of activity, was taken into consideration.

SUMMARY CHAPTER 4: COUNTERING ECONOMIC-FINANCIAL CRIME

The literature provides little empirical evidence on the impact of discouragement measures of financial crime on reducing the volume of economic-financial crime. Therefore, in this chapter we aimed to identify as much as possible the effectiveness of measures to prevent and counter economic-financial crime in Romania, the relationship between the volume of economic-financial crime and the effectiveness of measures to prevent and counter economic and financial crime in Romania, and the opinion of the Romanian market players on the problem of economic-financial crime, through three case studies.

4.1. Case Study. The Analysis of the efficiency of measures to prevent and counter economic-financial crime in Romania.

Research objective No 8. The effectiveness of the measures to prevent and fight economic-financial crime at the level of the counties of Romania, as well as on the main economic fields.

The efficiency of measures to counter economic-financial crime is measured by using an indicator we call the Degree of Damage Recovery, which is calculated as the ratio between the damage recovered and the damage caused (*100).

The 17 domains of activity, selected for analysis, are relatively restrictive, compacted according to the type of economic and financial fraud, illicit activities and operations carried out by criminal organizations, chosen on the basis of statistical data provided by the County Directorate of Operational Records and Criminal Records Bucharest. The 17 domains are: public administration and budgetary institutions, education, culture, sport, etc.; health, public acquisitions; labor protection; customs fraud; tourism; financial crime, offences in the field of credit institutions, financial leasing, insurance and reinsurance; agriculture and land; food industry; gambling; construction; recyclable materials; environmental protection; forestry; alcohol; tobacco; energy products, excise fraud; transport, road infrastructure. The same approach was also taken in terms of the amount of damages determined both in the caused and recovered version, under the law, at the time of the end of the criminal prosecution as a phase of the criminal process, carried out by the criminal investigation body. Therefore, we focused our attention on the 17 domains of activity belonging to the main sectors of the economy vulnerable to fraud and we determined the damage caused by economic-financial crime, a percentage of the damage recorded versus to damage recovered for each vulnerable domain.

4.1.1. Outcomes and Discusions

The domains with the highest efficiency in terms of the ratio of damage recovered versus damage caused over the period 2011-2019 are: tobacco (68.73%); health (54.54%); and forestry (41.75%). It can be deduced that in these domains the relevant assets have been identified for the taking of distraint measures by the judicial body as early as possible in the prosecution phase, which is a guarantee that they will not be sold or destroyed, that the State or the damaged institutions will be able to recover the damage caused in the event of a final decision of conviction and that the convicted persons will be deprived of the illegally acquired assets.

At the other end of the scale are customs fraud (only 8.91%), recyclables (13.48%) and gambling (15.4%). A degree of recovery of the damage caused between 20%-30% is recorded

in the domains of agriculture (20.17%); transport (20.98%); Environment protection (23.16%); Public administration and budgetary institutions, education, culture and sport with a percentage of (24.58%); Alcohol (26.86%); Energy and excise products (26.95%); and construction (29.34%). Furthermore, between the values of 30%-40%, are included activities carried out in the field of "financial crime" namely, credit institutions, financial leasing, insurance and reinsurance (31.82%); labor protection (36.01%); tourism (36.47%); and food industry (37.21%).

4.2. Case study. The relationship between the volume of economic-financial crime and the efficacy of measures to prevent and counter economic-financial crime in Romania.

Research objective No. 9 The relationship between the volume of economic-financial crime and the efficacy of measures to prevent and counter economic-financial crime in Romania

Another way of analyzing the efficiency of measures to prevent and counter economic-financial crime in Romania is determined with the help of an empirical study, in which we set out to study the existence of a relationship between the volume of economic-financial crime and the efficiency of measures to prevent and counter economic-financial crime in Romania.

The extent of economic-financial crime is measured by the crime rate. It is calculated as the ratio of the volume of crime (i.e. the number of crimes per fraction of the population (usually 100,000 inhabitants) in a given period, to the population.

The efficiency of measures to counter economic-financial crime is measured by *the ratio of the damage recovered and the damage caused* (noted as Damage).

4.2.1. Conclusions

Following this study, we summarize that there is a statistically significant relationship between the crime rate and the percentage of recovered damage in the short and medium term.

An increase with 1% in the crime rate leads to a 55.8 percentage point increase in the percentage of recovered damage. But in the long run this becomes insignificant.

We believe that there should be closer cooperation and connection between the criminal investigation body and economic specialists. It is our opinion that in financial investigations in complex cases, it would be advisable to involve, in addition to the criminal investigation bodies, forensic accounting experts to identify all assets and valuation experts to quantify the market value of assets subject to distraint measures in criminal cases.

As is well known, illegally acquired wealth is often not in the possession of the perpetrators. It would therefore be useful, in order to prevent the alienation of potentially illegally acquired assets, to extend the financial analysis to relatives and close associates of the person concerned, which would lead to an increase in the recovery of the damage. Or this takes time, the seizure measure must be taken very quickly.

Another aspect to improve the recovery rate could be the appointment by the court of a forensic accountant in case of enforcement measures on the assets of entities that have caused damage. It could keep a balance between the interest of the state and ensuring the recovery of any damage. At the same time, it could ensure the proper functioning of the company during the criminal proceedings and protect the interests of the company.

The main contribution of this research is to analyze the relationship between the crime rate and the share of damage caused in damage recovered, on long and short term. Secondly, our study specifies the need for the criminal investigation body to cooperate with economic specialists who must be involved in the financial analysis and assessment of the damage to the state budget. The conclusions are important as they can predict the efficiency of the criminal investigation body in terms of the efficiency of the recovery of the damage and the valuation

of the assets subject to penal seizure as well as the identification of the movable or immovable assets that may be subject to penal seizure.

At the same time, we recommend maintaining a balance between the interest of the State and the right to guarantee the recovery of any damage, which could be achieved by appointing forensic accountants in the event of penal seizure of assets belonging to corporate entities. Our research has some limits. One of these is the small sample size, due to the lack of reliable data on damages caused and recovered. In this case, only the amount of damages recorded at the time of the end of the criminal prosecution, as a phase of the criminal process, carried out by the criminal investigation body, the Economic Crime Investigation Structures of the Romanian Police, were taken into consideration, with the exclusion of damages recorded and recovered by other police structures or institutions with control authority in the economic-financial field.

4.3 Case study-opinion survey. The opinion of Romanian market players on the issue of economic-financial crime.

Obiectival de cercetare nr. 10. The opinion of Romanian market players on the issue of economic-financial crime.

Actors in economic life (economic entities, government, political parties) have different interests in the issue of economic-financial crime, that can often be in conflict. Tax reduction for economic entities in the effort to attract or stimulate investments can undermine the state's revenue-generating capacity and force governments either to raise taxes again to reduce public debt caused by tax cuts or to cut spending (Romer & Romer, 2007).

Granting attractive tax breaks to businesses may also appear to be politically preferential treatment for organized businesses and difficult to justify from an electoral point of view. If tax cuts for business are interpreted as tax cuts for the rich at the expense of social security for the middle class, governments may face a game at the ballot box.

Alternatively, if governments choose instead to maintain very high taxes in areas of business interest, governments risk losing the confidence of economic entities and lose important revenues collected to the budget that will reduce the financial capacity to provide social security and public services.

An initial sample of 128 respondents was targeted to carry out this study. A questionnaire consisting of 9 questions and 68 items was applied to them. Of the original sample, 100 respondents sent the completed questionnaire, forming the final sample. Of these, 41 are lawyers, both in the state judicial system, in public institutions, public prosecutor's offices and in the private sector, and 59 are specialists from the economic field and accounting experts.

4.3.1. Conclusions

As expected, respondents in the legal field ranked the case for a laborious and unpredictable legislative framework more highly than those in the economic field, who ranked it lower. Regarding the cause of political meddling in economics and the related impact, economists rated it better while jurists weaker. It is also accepted that there are significant differences of opinion between economists and jurists and on bureaucracy.

The common opinion, listed by respondents as the most important consequence, is the significant decrease in state budget revenues with negative effects on the financing of education, health, etc.

Regarding the opinion of actors about the consequences of economic-financial crime, we noticed that there is a significant difference of opinion about the consequences of the slowdown of the country's economic development.

When it comes to measures to eradicate the phenomenon of economic crime, it appears to be most divergent opinions. Jurists argue that it can be reduced, in particular, by developing a new legislative framework to hold criminals accountable, ranking it as the most important measure. For economists, the most important measure would be a radical reform of Romanian education at all levels. There are also significant differences in terms of tax cuts and the training of future managers. However, as a common measure, seen at the level of rankings the most important is the limitation of politicians' interference in economic strategy and less important through transparency in the material, fair and equitable stimulation of those who achieve notable results in the activity.

Another significant relevant difference between the opinions of economists and jurists is how economic crime is viewed in Romania versus worldwide.

SUMMARY CHAPTER 5: GENERAL CONCLUSIONS FROM THE THESIS STUDIES, OWN CONTRIBUTIONS AND RESEARCH LIMITS

5.1. General Conclusions

The paper "Economic-financial crime in Romania within the European context" offers a theoretical and practical approach of this phenomenon. From the very beginning, we have tried to emphasize the extent and complexity of this phenomenon, as well as the difficulty of quantifying it. We have also had in mind, and focused on, detailing the harmful damage done to the state, and also on the efficiency of measures to counter this phenomenon.

Therefore, this paper started with a series of stimulating questions that guided our scientific approach, and finally, we outlined our answers and contributions in the research of this phenomenon:

✓ What is the level of economic crime in EU countries?

Viewed through the perspective of the money laundering vector, we estimate that developed countries such as Luxembourg, the UK and other Western European countries have the highest levels. The causes could be sought among the high rate of financial market sophistication, economic growth reflected as GDP/capital, but also cultural influences. If we refer to the corruption component, we note that the highest levels are in South-Eastern European countries such as Bulgaria followed by Romania and Greece and the lowest level in the European Union is in the Nordic countries: Denmark; Finland; Sweden; the Netherlands. In addition, the level of the underground economy is high in countries such as Cyprus; Bulgaria and Romania and at the other end of the spectrum are Austria; Luxembourg and the Netherlands. We can see that the average level of the underground economy in the European Union is 17.3%, which means that almost one fifth of the GDP of the European Union countries is unrecorded, lost in the underground economy.

✓ What is the level of economic crime in Romania?

Seen through a global approach, we see trends in the reduction of corruption over the period analyzed, but with variations, the lowest value being recorded in 2016 and the highest value during 2005. As a percentage of Romania's GDP, the underground economy is at its lowest level between 2014 and 2017, with the highest values recorded in the first years of analysis 2005-2006. As in the case of corruption, the economy follows a downward trend in general, but with a visible increase in 2009. Concerning money laundering the trend is volatile, as in the first years of analysis we see decreasing values from year to year

reaching the minimum in 2016. After this year the risk values are increasing, with a maximum during 2020.

✓ The damage caused and the economic-financial crime show phenomena of contagion and diffusion between counties?

According to this study, we estimated that the amount of damage recorded at the county level is not influenced by neighborhood and interactions with neighbors. Moreover, the mostly downward trend over the last 10 years could be based on a convergence process leading to an equilibrium. The same cannot be said in terms of economic-financial crime in total crime at county level. We appreciate that there is a process of contagion and diffusion, which indicates that the mechanisms of crime or actions taken are learned in small social groups, through the transmission of patterns or through the method of conceptual maps, procedures or preconceptions. Moreover, a significant decrease has been observed over time for the whole country. Thus, the counties are beginning to show similar behavior, i.e. increasingly similar proportions of economic-financial offences in overall offences, which implies that, in this case too, we can also talk about a process of convergence, a process that can be related to the participants, all tending towards a common goal, namely to gain an advantage by evading tax obligations due to the state budget.

We estimate that the level of economic-financial crime in Romania reached its highest level in the central-northern area and the area around the capital during 2010.

Meanwhile, a shift of economic-financial crime in Romania towards the northern part of Moldova and the eastern part of Transylvania can be observed, with the highest level in 2013. At the end of the analyzed period 2019, the highest level was found towards the western border of the country. The cause of this change is likely to be linked to technological developments given the increased activity and increasingly elaborate cross-border fraud schemes in these areas. As a contribution in this direction, we believe that the prevention and countering of economic-financial crime could be oriented towards preventing the phenomenon of contagion and diffusion of economic crime.

✓ In Romania, are tax evasion offences linked to other types of economic-financial crime?

From the point of view of the dynamic analysis, we notice that there are variations over time for each type of crime, possibly due to factors such as economic, social, political, cultural, plus other secondary or accidental factors (e.g. criminal policy factors, some exaggerated incriminations or hasty decriminalisation, amnesties, pardons), and the evolution of crime shows a downward trend. Among the causes, we believe that the high values at the beginning of the period may be due to the economic crisis in Romania in 2009-2012. The economic crisis means unemployment, inflation, rising prices and deprivation for many people. All this brings with it an increase in crime, including economic crime.

At the same time, we established that tax evasion offences are positively correlated with forgery offences as well as money laundering offences. A high number of tax evasion offences is accompanied by a high number of counterfeiting offences and a high number of money laundering offences. An interesting result is that we do not identify significant links between *tax evasion and corruption*, as well as between *tax evasion and forestry code offences*.

Also in terms of contributions, we consider that, *from a theoretical point of view*, it will bring new knowledge on the dimension, evolution and interactions that characterize the phenomenon of economic crime.

From a practical point of view, authorities could use the results of the current research to inhibit economic crime by applying new, more dynamic and effective measures.

✓ What is the level of tax burden in Romania compared to EU countries?

The highest levels of total tax burden, (calculated on both taxes and social contributions) are recorded in; Denmark; France; Belgium; Austria; Finland; Italy; Sweden; Germany. At the other end of the scale, the European Union countries with the lowest levels of total tax burden are: Estonia; Romania; Ireland; Bulgaria; Latvia and Slovakia.

According to the study, in terms of total tax burden, Romania is among the countries with the lowest levels of tax burden in the European Union, second after Estonia for the period 2005-2018 (with 24.9). In Romania, the total tax burden is well below the EU average for the entire period under review, with values ranging from approximately 25-28%. Throughout the period 2005-2018 we see quite fluctuating values of the tax burden. Thus, for the period 2005-2009 we find quite high values of the tax burden in Romania, with a general trend of decrease from about 28% (2005) to about 25% (2009), after which in the period 2010-2015 we find a slight trend of increase of the total tax burden around the values of 27-28%. In the following period, 2015-2018, we can observe a decreasing trend of the total tax burden, around 26%, while the gap with the EU average values is increasing.

✓ How public tax pressure and tax evasion are correlated in the European Union?

The results gave us indications of an indirect relationship between tax pressure and tax evasion, but not statistically significant. This means that when the tax burden increases, the level of tax evasion decreases. Usually, we would expect the level of the underground economy to increase as a result of an increase in the tax burden. However, similar results are obtained by other studies such as: (Calderwood & Webley, 1992); (Kawano & Slemrod, 2016); (Achim, Borlea, Găban & Cuceu, 2018). The results of these studies show either a negative influence of the tax burden on the level of the underground economy, a link or a positive link. As (Schneider et al., 2010) assess, the explanation for these results that contradict expectations could be related to the different way of measuring the tax burden for each country.

The reason for such different results from one study to another may also be due to the fact that tax and social security systems are very different within the countries analyzed.

✓ How and in which areas does fiscal pressure (through the level of VAT) relate to the damage caused and recovered in Romania?

Based on the study, we estimated that, in the short term, a change in VAT leads to an average decrease of 26.4% in the damage caused. It should also be noted that the VAT changes recorded over the whole period analyzed represent only decreases. Implicitly, we can conclude that the decrease in VAT leads to a decrease in the amount of damage caused.

The same type of relationship was obtained, in the short term, in the case of recovered damage, but the impact of the VAT decrease is more pronounced, i.e. 32.4%.

Thus, it can be observed that the VAT decreases during the period under review had a significant impact on the two types of damage, in the sense of reducing them. The impact of the decrease in the VAT rate is not only evident in the short term but also in the long term.

As a personal contribution, we consider that the decrease in the fiscal pressure of VAT has led to a decrease in economic-financial fraud intents, estimated by the amount of damage caused and recovered.

✓ How effective is the fight against economic crime and in which domains of economic activity in Romania?

The efficiency of measures to counter economic-financial crime is measured by an index we call the **degree of damage recovery**, calculated as *the ratio between the damage recovered and the damage caused* (*100).

During the period under review, there is a fluctuation in the efficiency of the recovery of damage, with the highest efficiency in 2012 (34.77%) followed by the lowest efficiency in 2013 (21.76%).

Regarding the domains of activity where the highest efficiency is recorded in terms of the ratio between the damage recovered and the damage caused, for the period 2011-2019, are: Tobacco (68.73%), Health (54.54%) and Forestry (41.75%). We can assume that, in these domains, the relevant assets have been identified for the adoption of seizure measures by the judicial body as early as possible in the criminal prosecution phase, which represents a guarantee that they will not be alienated or destroyed, that the State or the institutions will be able to recover the damage caused in the event of a final decision of conviction and that the convicted persons will be deprived of the illegally acquired assets.

At the other end of the scale are Customs Fraud (only 8.91%), Recyclables (13.48%) and Gambling (15.4%).

A degree of recovery of the damage caused between 20%-30% is recorded in the activities of agriculture (20.17%), transport (20.98%), environmental protection (23.16%), public administration and budgetary institutions, education, culture and sport (24.58%), alcohol (26.86%), energy and excise products (26.95%) and construction (29.34%).

Also included in the 30%-40% range are activities carried out in the area of "financial crime", i.e. credit institutions, financial leasing, insurance and reinsurance 31.82%, labor protection 36.01%, tourism 36.47% and food industry 37.21%.

✓ Is there a correlation between the efficiency of measures to counter economic-financial offences and economic-financial crime in Romania?

Based on this study, we summarize that there is a statistically significant relationship between the crime rate and the percentage recovered from the short- and medium-term damage. We can also state that there is a link in this case, in that an increase in the crime rate by 1% leads to an increase in the proportion of damage recovered by 55.8 percentage points. However, in the long term this becomes insignificant.

✓ Are there conflicting opinions between specialists of legal and economic fields, over the causes, consequences and measures to reduce economic crime?

Respondents from the legal field ranked the case for a laborious and unpredictable legislative framework more highly than those from the economic field, who ranked it lower. With regard to the cause of political interference in the economy and the related impact, economists ranked it higher while jurists ranked it lower. It is also accepted that there are significant differences of opinion between economists and jurists and on bureaucracy.

Regarding the opinion of the actors about the consequences of economic-financial crime, we consider that there is a significant difference of opinion about the consequences of the slowdown of the country's economic development. As regards encouraging the emigration of labor, especially of young people, respondents from the legal field ranked the consequence more highly than those from the economic field, who ranked it lower, with significant differences of opinion.

When it comes to the possibility of eradicating the phenomenon of economic crime, most divergent opinions appear in this direction. Economic-financial crime can be diminished in particular by developing a new legislative framework to hold criminals accountable, according to the opinion of almost half of the jurists. They ranked this measure first, as opposed to only 17.5% of economists. For economists, the most important measure would be the radical reform of Romanian education at all levels (over 28% of them). Significant differences of opinion also emerged on reducing taxation and on the demanding and responsible training of future managers.

In assessing the opinions, both jurists (46%) and economists (almost 40%), consider that economic crime is more common in less developed countries, ranking first in importance. According to the respondents' opinion on the importance of the active, determining role in limiting and eradicating the phenomenon of economic crime in Romania and possible measures to reduce it, it can be seen that, for respondents from the legal field, two structures ranked first, on a par, being the most important: the educational process of the entire population of the country and fiscal authorities.

The importance of developing a new legislative framework to hold criminals accountable is directly and medium correlated with DNA, DIICOT and Police Inspectorates. There is also a direct but weak link between this measure and the Prosecutor's Office or the Courts. The opposite link, of weak or medium intensity, is found with Population, Managers and the educational process of the whole population. The result shows that the level of importance of this measure is directly correlated with inspection bodies with judicial power and inversely correlated with population and other non-judicial aspects taken into account. A high importance of a good legislative framework is attached to a low, insignificant role of the population, managers and the educational process in the fight against economic crime.

In the last part, the respondents' opinion on economic crime in Romania versus the world level, the efforts made to reduce it in the country versus what happens worldwide, and the results obtained by the Romanian authorities in the fight against this phenomenon were evaluated. The majority of respondents ranked Romania in terms of the level of economic crime in the middle of the international ranking.

5.2. Inputs resulted from the scientific research

The features of originality that we believe the current thesis brings relate to:

- 1. Quantifying the current level of economic crime in EU countries
- 2. Assessing the current level of economic crime in Romania...
- 3. Addressing economic-financial crime and interjurisdictional contagion and diffusion phenomena.
- 4. Another contribution is to identify the links between tax evasion offences and other types of economic-financial crime.
- 5. To score the level of fiscal pressure in Romania compared to the European Union countries.
- 6. Analysis of the relationship between public tax burden and tax evasion at EU level.
- 7. Addressing, by activity domain, the relationship between tax-pressure (VAT) vs. damage caused and recovered, in Romania.
- 8. Assessment of the effectiveness of the fight against economic crime at national level, by main areas of economic activity.
- 9. Quantification of measures to counter economic crime in relation to economic-financial crime in Romania
- 10. Opinion survey on the perception of legal and economic specialists regarding the causes, consequences and measures to curb economic crime.

5.3. Limits and perspectives of the scientific research

A. Limits

The limits of our research can be analyzed both at the level of doctrinal and empirical research. It is impossible to review the entire scientific literature, even more so in our case, which focused on the complexity of the whole phenomenon of economic-financial crime. We have tried to theoretically outline the level of this phenomenon at a global level, to perceive the architecture of economic-financial crime, by limiting ourselves to the essence of its most

relevant components, i.e. to the interactions that form within this phenomenon. From the point of view of empirical research, the data and information available at national level were limited in time and space, they were relatively restricted, compacted, depending on the type of economic-financial fraud, illicit activities, highlighted on the basis of statistical data, provided by the County Directorate of Operational Records and Criminal Records Bucharest. The same typology has also been addressed in terms of the amount of damages determined both in the caused version and in the recovered version, according to the law, at the end of the criminal prosecution as a phase of the criminal process, carried out by the criminal investigation body. We would like to mention that this scientific work includes the economic and financial crimes and the damages recorded by areas, by the County and Bucharest Police Inspectorates, Economic Crime Investigation Services, excluding the damages established and recovered related to other police structures or institutions with control attributions in the economicfinancial field. Another limit of this study is that other links, such as corruption, which is another significant component of the phenomenon investigated in relation to other economic and financial crimes, have not been analyzed, all of which will constitute a concern and careful research for the future period.

B. Perspectives

As far as the prospects for future research are concerned, we point out that they are to a large extent directly related to the limits of the present scientific approach. At the level of theoretical research, some aspects of the literature on the instruments and mechanisms of fraud that interact in this phenomenon could also be addressed. In terms of future empirical research, an extension could also be considered in terms of collecting more data on the amount of damage caused and recovered, declared by other institutions with control attributions, in the economicfinancial field and areas of analysis. Consequently, based on the results of the research, which are extensively reflected in the conclusions section, we consider that the damage to the consolidated state budget can no longer be countered by conventional means alone. It is necessary to create and consolidate a single information system, in which to implement accurate values of the damage caused and recovered to the state budget, to be supplied with reliable data by institutions with control attributions in the economic-financial field. By implementing this unique information system, the national indicator of the degree of damage in the main areas of the economy would be permanently known. According to the studies carried out, it is interesting that we have not identified significant links between evasion and corruption, as well as between evasion and forestry code offences, so it would be appropriate to analyze the links through the perspective of corruption offences in relation to other economic-financial offences.

BIBLIOGRAPHIC REFERENCES

BOOKS

- 1. Achim, M.V., Borlea, N.S., (2020). *Economic and financial crime, Corruption, shadow economy, and money laundering*. Springer Nature Switzerland AG;
- 2. Achim, M.V., (2017). *Coruptia și economia subterana. Teorii si studii*. Ed. Presa universitară clujeană, ISBN: 978-606-37-0217-4;
- 3. Achim, M.V., & Borlea, N.S., (2019). Criminalitatea economico-financiara. Coruptia, economia subterana si spalarea banilor. Cauze, efecte, solutii. Abordari teoretice si practice. Editura Economica, Bucuresti:
- 4. Amza, T., (2002). Criminologie, Tratat de teorie si politică criminologica, Ed. Lumina Lex, Bucuresti;
- 5. Amza, T., (2011). Criminologie. Suport de curs. Universitatea Hyperion, Bucuresti:
- 6. Aniței, N.C. & Lazăr, R. E., (2016). Evaziunea fiscala intre legalitate si infractiune. Ed. Universul Juridic, Bucuresti;

- 7. Banciu, D., (2000). Elemente de sociologie juridica. Ed. Lumina Lex, Bucuresti;
- 8. Bodu, S. & Bodu, C., (2016). *Infractiuni economice*. Comentarii și explicatii. Adnotari cu jurispruenta, p.196. Rosetti Publishing House, Bucuresti;
- 9. Bonger, W.A., (1905). Criminalite et conditions economiques. University of Michigan Library;
- 10. Bonger, W.A., (1916 [1905]). *Criminality and economic conditions*. Translated by G. P. Tierie. Boston: Little. Brown:
- 11. Bucur, D., (2011). *Criminalitatea transfrontaliera si economia globalizata*. Bucuresti: Pro Universitaria Publishing House;
- 12. Bujor, V.O.B., (1999). Criminalitatea profesionala. Ed. Lyceum, Chisinau, p. 4-5;
- 13. Cambridge Dictionary, (2020). Cambridge University Press;
- 14. Carasciuc, L., Ciubotaru, M., Patiuc, N., & Bejan, L., (2003). *Coruptia și evaziunea fiscala: dimensiuni economice*. Chisinau: Transparency International Moldova;
- 15. Cendrowski, H., Martin, J. & Petro, L., (2007). *The Handbook of Fraud Deterrence*. N.Y.: Wiley Publisher;
- 16. Chan, C.W., Troutman, C.S., & O'Bryan, D., (2000). An expanded model of taxpayer compliance: Empirical evidence from the United States and Hong Kong. Journal of International Accounting Auditing and Taxation, 9 (2), p. 83–103;
- 17. Ciobanu, I. A., (2007). *Criminologie*. Catedra Drept Penal si Criminologie. Cartdidact, (Tipografia "Reclama"). Vol. I 2007, ISBN: 978-9975-9912-1-6;
- 18. Voicu, C., Sandu, F., Boroi, A. & Molnar, I., (2002). *Drept penal al afacerilor*. Ed. Rosetti, Bucuresti, p. 8;
- 19. Coteanu, I., Seche, L. & Seche, M., (1998). *Dictionar explicativ al limbii romane*. Ediția a II-a. Univers enciclopedic, Bucuresti;
- 20. Cunder, D., (2015). *Shadow economy and money laundering*. University of New York in Prague European Business Administration;
- 21. Danes, S. & Papadopol, V., (1985). *Individualizarea judiciară a pedepselor*. Editura stiintifica si Enciclopedica, Bucuresti;
- 22. De Goede, M., (2008). *Risk, preemption, and exception in the war on terrorist financing*. In L. Amoore & M. de Goede (Eds.), *Risk and the war on terror* (pp. 97–111). Routledge Development, New York, Vol. 60;
- 23. Dictionarul explicativ al limbii romane (1975). Ed. Academiei, Bucuresti;
- 24. Dinga, E., (2009). Studii de economie. Contributii de analiza logica, epistemologica si metodologica. Ed. Economica, Bucuresti;
- Dobrinoiu, V., Hotca, M.A., Gorunescu, M., Dobrinoiu, M., Pascu, I., Chiş, I. & Sinescu, M.C., (2014).
 Noul Cod penal comentat. Partea specială. Editura Universul Juridic, Bucuresti, pp. 766-768;
- 26. Durkheim, E., (1974). Regulile metodei sociologice. Editura Stiintifica, Bucuresti;
- 27. Edwin, H.I.L.L., (1872). *International Prison Congress*. Criminal Capitalists, London, Spottiswoode & Company;
- 28. Elliott, K.A. (1997). Corruption as an inter;national policy problem: Overview and recommendations, In Corruption and the Global Economy, ed. K. Elliot, Washington, DC: Institute for International Economics;
- 29. Eurostat (2014). *Essential SNA: Building the basics*. Publications Office of the European Union, Luxembourg;
- 30. Feld, L. P., & Larsen, C., (2005). *Black activities in Germany in 2001 and 2004: A comparison based on survey data.* Vol. 12, Rockwool Foundation Research Unit;
- 31. Feld, L., & Larsen, C., (2009). *Undeclared Work in Germany 2001-2007–Impact of Deterrence, Tax Policy, and Social Norms: An Analysis Based on Survey Data.* Springer-Verlag, Berlin, Heidelberg;
- 32. Gallet, O., (2010). Halte aux fraudes. Guide pour auditeurs et dirigeants. 2e édition. Dunod, Paris;
- 33. Garofalo, R., (1885). Criminologia. Studio sul delitto, sue cause e sui mezzi di repressione. Bocca fr;
- 34. Gaylord, M.S., & Galliher, J.F., (2020). The Criminology of Edwin Sutherland. Routledge;
- 35. Gladkii, G., (2001). *Criminologie generala*. Institutul pentru politici legislative si constitutionale, Budapesta (COLPI);
- 36. Goldman, P.D., (2010). Financial Services Anti-Fraud Risk and Control. Workbook. Canada: John Wiley & Sons Inc;
- 37. Gradeva, K., (2014). VAT fraud in intra-EU trade. Goethe University, p. 33;
- 38. Grosanu, A., (2013). Contabilitate creativă. Editura ASE, Bucuresti, p. 60-61;
- 39. Hayes, R., Dassen, R., Schilder, A., & Wallage, P., (2005). *Principles of Auditing. An Introduction to Intenational Standards of Auditing*. 2nd edition, Ed. Pearson Education;
- 40. Hoanta, N., (2000). Economie ssi finante publice. Editura Polirom, Iasi;
- 41. Hoanta, N., (2010). Evaziunea fiscala. Ediția a II-a, Editura C. H. Beck, Bucuresti;

- 42. Ionita, G.I., (2010), Criminologie teoretica si aplicata. Ed. Universul Juridic, Bucuresti.
- 43. Kaminski, K.A., Wetzel, T.S., Guan, L. (2004), Can financial ratios detect fraudulent financial reporting?, *Managerial Auditing Journal*, Vol. 19, No. 1, pp. 15-28;
- 44. Kanyama, I.K. (2014). Quality of institutions: Does intelligence matter? *Intelligence*, 42, 44–52;
- 45. Kirchler, E., (2007). The economic psychology of tax behavior. Cambridge University Press, U.K.;
- 46. Laffer, A., (2004). The Laffer curve: Past, present and future. The Heritage Foundation;
- 47. Lazar, A., (2008). Ancheta antifrauda in mediul afacerilor, Bucuresti, Ed. Lumina Lex, 304;
- 48. Lazar, A., & Alamoreanu, S. (2008). Expertiza criminalistica a documentelor. Aspecte tactice si tehnice. Ed. Lumina Lex, Bucuresti.
- 49. Letia, A.A., (2014). *Investigation of business crime: money laundering, corruption and tax fraud, theoretical and practical aspects.* Universul Juridic Publishing House, Bucuresti, Romania;
- 50. Mara, E.R., (2010). Finantele publice intre teorie si practica. Risoprint Publishing House, Cluj-Napoca;
- 51. Mara, E.R., (2009). Finantele publice intre teorie si practica, Ed. Risoprint, Cluj-Napoca;
- 52. Martinez, J.C., (1990). La fraude fiscale. Editura Puf, Paris;
- 53. McGee, R.W., (2008). Taxation and public finance in transition and developing economies. Springer, New York:
- 54. McGee, R.W., (2012). The ethics of tax evasion: Perspectives in theory and practice. Springer New York:
- 55. Merton, R.K., (1968). Social theory and social structure. Free Press, Enlarged Ed edition, New York;
- 56. Mocuța, G., (2004). Criminalitatea organizata si spalarea banilor, Editura Noul Orfeu, Bucuresti;
- 57. Moldoveanu, N., (1999). *Criminalitatea economico-financiara*. Global Print Publishing House, Bucuresti;
- 58. Moore, M., (2014). Revenue reform and statebuilding in Anglophone Africa. World;
- 59. Nita, N., (2008). Descoperirea si combaterea infractionalitatii economico-financiare. Valorificarea informatiilor furnizate de contabilitate, Editura Tehnopress Iasi, Romania;
- 60. O'Regan, D., (2004). Auditor's dictionary: terms, concepts, processes, and regulations. John Wiley & Sons, New Jersey;
- 61. Pantea, M., (2010). *Investigarea criminalitatii economico-financiare*. Pro Universitaria Publishing House, Bucuresti;
- 62. Pasca, V., (2000). Bancruta frauduloasa -Comentarii de practica judiciara. Lumina Lex, Bucuresti;
- 63. Pedneault, S., (2009). Fraud 101. John Wiley&Sons, inc., Hoboken;
- 64. Pinatel, J., (1971). La societe criminogene. Ed. Calmann-Levy, Paris;
- 65. Popescu, I., (2004). Globalizarea, mit si realitate. Ed. Economica, Bucuresti;
- 66. Pradel, J., (2019). Du principe de proportionnalite en droitpenal. Les Cahiers de droit. 60(4), p. 1129-1149;
- 67. Schneider, F. & Williams, C.C., (2013). The shadow economy. Institute of Economic Affairs, London;
- 68. Singleton, T.W. & Singleton, A.J., (2010). *Fraud Auditing and Forensic Accounting*. Fourth Edition, John Wiley & Sons, Inc, New Jersey;
- 69. Sutherland, E., (1966). *Principes de criminologie*. Version française établie sur le texte de la sixieme edition de Principles of Criminology, Ed. Cujas, Paris;
- 70. Sutherland, E.H. & Locke, H.J., (1936). Twenty thousand homeless men. J.B. Lipincott, Chicago;
- 71. Scheau, M.C., (2018). Criminalitatea informatica privind transferurile financiare. Ed. Economica, Bucuresti, Romania;
- 72. Tarde, G., (1886). La criminalite comparee. Paris: Flix Alcan
- 73. Tarde, G., (1890). The laws of imitation. Henry Holt, New York;
- 74. Tarde, G., (1890). La philosophie penale. La España Moderna, A. Storck;
- 75. Toader, T., (2011). Drept penal roman: partea speciala. Editura Hamangiu, Cluj-Napoca.
- 76. Tomas, R. (2010). *Crisis and shadow economy in Bosnia and Herzegovina*. Friedrich Ebert Stiftung, Sarajevo;
- 77. Torgler, B., (2007). *Tax compliance and tax morale: A theoretical and empirical analysis*. Edward Elgar Publishing, Glesanda House, Montpellier Parade, Cheltenham, Glos GL50 1UA, U.K;
- 78. Troncota, C., (2008). Studii de securitate. Universitatea "Lucian Blaga", Sibiu, p. 10;
- 79. Tulai, C., (2003). Finantele publice si fiscalitatea. Editura Casa Cartii de Stiinta, Cluj-Napoca;
- 80. Vacarel, I., (2006). Finante publice. Editura Didactica si Pedagogica, Bucuresti;
- 81. Vacarel, I., (2008). *Studii de istoria gandirii si practicii economico-financiare*. Editura Academiei Romane:
- 82. Vergulini, G, (2014). Istoria mafiei. Vol. 3, Editura Enmar, Bucuresti.
- 83. Virjan, B. (2016). Infractiunile de evaziune fiscala, Ediția a II-a, Editura C.H. Beck, Bucuresti;
- 84. Watson, D.M., (2003). *Cultural Dynamics of Corporate Fraud*. <u>Cross Cultural Management: An International Journal</u>, Vol. 10, No. 1, pp. 40-53. https://doi.org/10.1108/13527600310797522;

- 85. Weber, A., (2005). *How far perceptions go.* Transparency Brazil Working Paper. The World Bank: Washington D.C.;
- 86. Troncota, C., (2008). Studii de securitate, Editura Aldine, Sibiu.

SCIENTIFIC ARTICLES

- 87. Achim, M.V., Borlea, N.S., & Anghelina, A. (2018b). *The impact of fiscal policies on corruption: A panel analysis*. South African Journal of Economic and Management Sciences, 21(1), pp. 1–9;
- 88. Achim, M.V., Borlea, N.S., Gaban, L.V. & Mihaila, A.A., (2019). The shadow economy and culture: Evidence in European countries. Eastern European Economics. 57(5), pp. 352–374;
- 89. Achim, M.V., (2016). *Cultural Dimension of Corruption: A Cross-Country Survey*. International Advances in Economic Research 22(3), DOI: 10.1007/s11294-016-9592-x;
- 90. Achim, M.V., Borlea, N.S., Găban, L. & Cuceu, I., (2018), *Rethinking the shadow economy in terms of happiness: evidence for the European Union member states*. Technological and Economic Development of Economy, 24(1), pp. 199-228;
- 91. Ainsworth, R.T., (2010). MTIC (VAT FRAUD), in VoIP-Market Size;
- 92. Ainsworth, R.T. & Hengartner, U., (2009). *Quebec's Sales Recording Module (SRM): Fighting the Zapper, Phantomware, and Tax Fraud with Technology*. Canadian Tax Journal / Revue Fiscale Canadienne, 57(4), pp.715-761;
- 93. Aizenman, J. & Jinjarak, Y., (2008). The collection efficiency of the Value Added Tax: Theory and international evidence. The Journal of International Trade & Economic Development, 17(3), pp. 391-410.
- 94. Ali, M.A., Azad, M.A., Centeno, M.P., Hao, F., & van Moorsel, A., (2019). *Consumer-facing technology fraud: Economics, attack methods and potential solutions*. Future Generation Computer Systems, 100, pp. 408–427.
- 95. Alm, J., & Prinz, A., (2013). *Introduction to the special issue: The shadow economy, tax evasion, and money laundering.* Public Finance Review, 41(5), pp. 507–509
- 96. Alm, J., Martinez-Vazquez, J., & Schneider, F., (2004). *Sizing the problem of the hard-to tax*. Contributions to Economic Analysis. Elsevier, 268, pp. 11–75;
- 97. Amara, I., & Khlif, H., (2018). Financial crime, corruption and tax evasion: a cross-country investigation. Journal of Money Laundering Control, 21(1), DOI: 10.1108/JMLC-10-2017-0059;
- 98. Amarita, A., (2017). Fiscal evasion in Romania. Revista Romana de Statistica, Supliment 1, pp. 3–21;
- 99. Amoore, L. & de Goede, M., (2005). *Governance, risk, and data veillance in the war on terror*. Crime, Law and Social Change, 43, pp. 149–173;
- 100. Andreoni, J., Erard, B. & Feinstein, J., (1998). *Tax Compliance*. Journal of Economic Literature, 36, pp. 818-860;
- 101. Antoci, A., Russu, P. & Zarri, L., (2014). *Tax evasion in a behaviourally heterogeneous society: An evolutionary analysis.* Economic Modelling, 42, pp. 106–115;
- 102. Ardizzi, G., Petraglia, C., Piacenza, M., Schneider, F. & Turati, G., (2014). *Money laundering as a crime in the financial sector: A new approach to quantitative assessment, with an application to Italy*. Journal of Money, Credit and Banking, 46(8), pp. 1555–1590;
- 103. Austwick, S., & Berga, I., (2016). Foreign investors viewpoint on the shadow economy in Latvia. KPMG. Available at https://docplayer.net/140175931-Foreign-investors-viewpoint-on-the-shadow-economy-in-latvia-may-2016.html. Accessed on 18 Feb 2020;
- 104. Badawi, M.I., (2008). *Motives and consequences of fraudulent financial reporting*. "The 17th Annual Convention of the Global Awareness Society International", San Francisco, CA, USA;
- 105. Barr, A. & Serra, D., (2010). *Corruption and culture: An experimental analysis*. Journal of Public Economics, 94, pp. 862–869;
- 106. Barrell, R. & Weale, M., (2009). The Economics of a Reduction in VAT. Fiscal Studies, 30(1), pp.17-30;
- 107. Basel Institute on Governance, (2020). Basel AML index.
- 108. Batrancea, L.M., Nichita, A., Batrancea, I., & Gaban, L., (2017). The strength of the relationship between shadow economy and corruption: Evidence from a worldwide country-sample. Social Indicators Research, 138(4), https://doi.org/10.1007/s11205-017-1696-z;
- 109. Bierstaker, J.L., Brody, R. & Pacini, C., (2006). Accountants' perceptions regarding fraud detection and prevention methods. Managerial Auditing Journal, Vol. 21, No. 5, pp. 520-535;
- 110. Bink, M.L., Wampler, R.L. & Cage, E.A., (2011). The retention of digital skills: command post of the future, Research Report 1937. U.S. Army Research Institute for the Behavioral and Social Sciences
- 111. Bird, R.M., & Zolt, E.M., (2008). *Technology and taxation in developing countries: from hand to mouse.* National Tax Journal, 61(4), Part 2, Technology, Privacy, and the Future of Taxation, pp. 791-821;

- 112. Borlea, N.S., Achim, M.V., & Miron, M.G. (2017). Corruption, Shadow economy and economic growth: An empirical survey across the European Union countries. Studia Universitatis "Vasile Goldis" Arad. Economics Series, 27(2), pp. 19-32;
- 113. Boroi, A., & Rusu, I., (2006). *Legea nr. 241/2005 pentru prevenirea și combaterea evaziunii fiscale.* Revista Dreptul, XVII, 2, pp. 9-17;
- 114. Bouwen, P., (2009). *The European Commission. Lobbying the European Union: Institutions, actors, and issues.* Oxford University Press, Oxford, pp. 19-38;
- 115. Brockett, P.L., Derrig, R.A., Golden, L.L. & Alpert, M., (2002). *Fraud Classification Using Principal Component Analysis of RIDITs*. The Journal of Risk and Insurance, Vol. 69, No. 3, pp. 341-371;
- 116. Buehn, A. & Schneider, F., (2009). Shadow economies and corruption all over the world: Revised estimates for 120 countries. Economics E-Journal, 1(9) Version 2, pp. 1–53;
- 117. Busato, F. & Chiarini, B., (2013). *Steady state Laffercurve with the underground economy*. Public Finance Review, 41(5), pp. 608-632;
- 118. Calderwood, G. & Webley, P., (1992). Who responds to changes in taxation? The relationship between taxation and incentive to work. Journal of Economic Psychology, 13(4), pp. 735-748;
- 119. Carden, A. & Verdon, L., (2010). *When is corruption a substitute for economic freedom?*. The Law and Development Review, 3(1), pp. 40–63;
- 120. Carpenter, T., (2007). Audit Team Brainstorming, Fraud Risk Identification, and Fraud Risk Assessment: Implications of SAS No. 99. The Accounting Review, Vol. 82, No. 5, pp. 1119-1140;
- 121. Carjaliu, C., (2009). *Acceptiuni si sensuri ale notiunii de coruptie*. Revista de Studii Juridice Universitare, (3–4), pp. 257–262.
- 122. Choi, J. & Thum, M., (2005). *Corruption and the shadow economy*. International Economic Review, 46(3), pp. 817–836.
- 123. Chong, A. & Lopez-de-Silanes, F., (2015). *Money laundering and its regulations*. Economics and Politics, 27(1), https://doi.org/10.1111/ecpo.12051;
- 124. Cohen, J., Ding, Y., Lesage, C. & Stolowy, H., (2010). Corporate Fraud and Manager's Behavior: Evidence from the Press. Journal of Business Ethics, 86;
- 125. Collin, M., (2020). Does the threat of being blacklisted change behavior? Regression discontinuity evidence from the EU's tax haven listing process. Global Economy & Development, working paper, 139;
- 126. Cressey, D.R. (1953). Other People's Money: a Study in the Social Psychology of Embezzlement. Glencoe, Ill., Free Press;
- 127. Davis, J.H. & Ruhe, J.A., (2003). *Perceptions of country corruption: Antecedents and outcomes*. Journal of Business Ethics, 43(4), pp. 275–288;
- 128. Dinga, E. (2008). *Considerații teoretice privind evaziunea și frauda fiscala*. Studii Financiare, 12(4), pp. 20–50;
- 129. Djankov, S., La Porta, R., Lopez-de-Silanes, F. & Shleifer, A., (2002). *The regulation of entry*. Quaterly Journal of Economics, 117(1), pp. 1–37;
- 130. Dragoş, S.L., Mare, C. & Dragoş, C.M., (2019). *Institutional drivers of life insurance consumption: a dynamic panel approach for European countries*. Geneva Pap Risk Insur Issues Pract 44, pp. 36–66, https://doi.org/10.1057/s41288-018-0106-3;
- 131. Dreher, A. & Schneider, F., (2006). Corruption and the shadow economy. An empirical analysis. IZA DP No. 1936;
- 132. Dreher, A., & Schneider, F., (2010). *Corruption and the shadow economy. An empirical analysis*. Public Choice, 144, pp. 215–238;
- 133. Dreher, A., & Siemers, L. H. R. (2009). *The nexus between corruption and capital account restrictions*. Public Choice, 140, pp. 245–265;
- 134. Durkheim, E., (1951). Suicide: a study in sociology. Translated by J.A. Spaulding and G. Simpson. The Free Press, Glencoe, Illinois;
- 135. Durkheim, E., (1974 [1898]). Collective Representations,' in T. Parsons (ed.) Sociology and Philosophy by Emile Durkheim. New York: The Free Press;
- 136. Durkheim, E. (1984). Die Regeln der soziologischen Methode. zuerst 1895;
- 137. Dutulescu, S. & Nisulescu-Ashrafzadeh, I., (2016). The main causes of corruption in Romania. Audit financiar, XIV, 8(140), pp. 918–926;
- 138. Dyreng, S.D., Hanlon, M. & Maydew, E.L., (2010). *The Effects of Executives on Corporate Tax Avoidance*. The Accounting Review 85(4), pp. 1163–1189;
- 139. Ebeke, C., (2015). *Remittances, Value Added Tax and Tax Revenue in Developing Countries*. [online] Available at http://publi.cerdi.org/ed/2010/2010.30.pdf/, accessed on 25 October 2020;
- 140. Elgin, C. & Oyvat, C., (2013). *Lurking in the cities: Urbanization and the informal economy*. Structural Change and Economic Dynamics, 27, pp. 36–47;

- 141. Faleye, O.A., (2013). *Religion corruption: a dilemma of the Nigerian state*. Journal of Sustainable Development in Africa. 15(1), pp. 170-185;
- 142. Feld, L.P., & Schneider, F., (2010). Survey on the shadow economy and undeclared earnings in OECD countries. German Economic Review, 11(2), pp. 109–149;
- 143. Fisman, R. & Miguel, E., (2007). *Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets.* Journal of Political Economy, 115(6), pp. 1020–1048;
- 144. Fjeldstad, O.H., (1996). Tax evasion and corruption in local governments in Tanzania: Alternative economic approaches. Working Paper 14. Chr. Michelsen Institute;
- 145. Fjeldstad, O.H., (2003). Fighting fiscal corruption: Lessons from the Tanzania revenue authority. Public Administration and Development, 23, pp. 165–175;
- 146. Friedman, E., Johnson, S., Kaufmann, D. & Zoido-Lobaton, P., (2000). *Dodging the grabbing hand: The determinants of unofficial activities in 69 countries*. Journal of Public Economics, 76, pp. 459–493;
- 147. Fritzen, S.A., Serritzlew, S. & Svendsen, G.T., (2014). *Corruption, trust and their public sector consequences: Introduction to the special edition*. Journal of Comparative Policy Analysis: Research and Practice, 16(2), pp. 117–120;
- 148. Gaspareniene, L., Remeikiene, R. & Schneider, F.G., (2017). *Concept, motives and channels of digital shadow economy: consumers' attitude*. Journal of Business Economics and Management, 18(2), pp. 273-287:
- 149. Gaspareniene, L., Remeikiene, R., & Skuka, A., (2016). Assessment of the impact of macroeconomic factors on housing price level: Lithuanian case. Intellectual Economics, 10(2), pp. 122-127;
- 150. Gebauer, A., Nam, C.W. & Parsche, R., (2007). Can Reform Models of Value Added Taxation Stop the VAT Evasion and Revenue Shortfalls in the EU? Journal of Economic Policy Reform, 10(1), pp. 1–13;
- 151. Ghosh, S. & Neanidis, K.C., (2011). *Corruption, fiscal policy, and growth: A unified approach*. Working Paper No. 11–20, pp. 1–42. London: Brunel University London;
- 152. Glaeser, E.L., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A., (2004). *Do institutions cause growth?* Journal of economic Growth, 9(3), pp. 271-303;
- 153. Goel, R.K. & Ram, R., (2013). *Economic uncertainty and corruption: Evidence from a large coutry dataset*. Applied economics, 45(24), pp. 3462-3468;
- 154. Gogolin, G., (2010). The digital crime Tsunami. Digital Investigation, 3, pp. 3–18;
- 155. Graeff, P. & Mehlkop, G., (2003). *The impact of economic freedom on corruption: Different pat-terns for rich and poor countries*. European Journal of Political Economy, 19, pp. 605–620;
- 156. Gyuricza, S.I. & Tugui, M., (2013). *The relationship of tax authorities with corporations in terms of transfer pricing (I)*. Accounting, expertise and business audit, (8), pp. 46-52;
- 157. Gyuricza, S.I., Lascu, R. & Gyuricza, M.A., (2017). Aspecte conceptuale privind frauda fiscala. CECCAR Business Magazine, 4, pp. 7–13;
- 158. Halkos, G.E. & Tzeremes, N.G., (2011). *Investigating the cultural patterns of corruption: A non-parametric analysis*. MPRA Munich Personal RePEc Archive;
- 159. Hanlon, M. & Heitzman, S., (2010). *A review of tax research*. Journal of Accounting and Economics, 50(2–3), pp. 127–178;
- 160. Hasan, M.S., Omar, N., Barnes, P. & Handley-Schachler, M., (2017). A cross country study on manipulations in financial statements of listed companies: Evidence from Asia. Journal of Financial Crime, 22, pp. 656–677;
- 161. Hirschi, T. & Hindelang, M.J., (1977). *Intelligence and delinquency: A revisionist review*. American Sociological Review, 42, pp. 571-587;
- 162. Husted, B.W. (1999). *Wealth, culture, and corruption*. Journal of International Business Studies, 30(2), pp. 339–359;
- 163. Iamandi, I. & Voicu—Dorobantu, R., (2007). Coruptia-un risc pentru Romania în Uniunea Europeana. *Economic Journal*, pp. 15-27;
- 164. Immordino, G. & Russo, F.F., (2018). *Cashless payments and tax evasion*. European Journal of Political Economy, 55, pp. 36–43;
- 165. Istrate, C., (2011). Evolutions in the Accounting Taxation (Dis)connection in Romania, After 1990. Review of Economic Business Studies, vol.4(2), pp. 43-61;
- 166. Ivanyna, M., Moumouras, A. & Rangazas, P., (2010). *The culture of corruption, tax evasion, and optimal tax policy*. Available online at http://www2.warwick.ac.uk/fac/soc/economics/events/seminars-workshops-conferences/conferences/mysore/programme/ivanyna.pdf;
- 167. Jimenez, A., Palmero-Camara, C., Gonzalez-Santos, M.J., Gonzalez-Bernal, J. & Jimenez-Eguizabal, J.A., (2015). *The impact of educational levels on formal and informal entrepreneurship*. Business Research Quarterly, 18(3), 204–212;
- 168. Johnson, S., Kaufmann, D. & Sleifer, A., (1997). *The unofficial economy in transition*. Brooking Papers on Economic Activity, pp. 159–221;

- 169. Kasipillai, J., Aripin, N. & Amran, N.A., (2003). *The influence of education on tax avoidance and tax evasion*. eJournal of Tax Research, 1(2), pp. 134–146;
- 170. Kaufman, D., (2010). *Can corruption adversely affect public finances in industrialized countries?*, April 19, Washington, available at https://www.brookings.edu/opinions/can-corruptionad-versely-affect-public-finances-in-industrialized-countries/; accessed on March, 2017;
- 171. Kawano, L. & Slemrod, J., (2016). How do corporate tax bases change when corporate tax rates change? With implications for the tax rate elasticity of corporate tax revenues. International Tax and Public Finance, 23(3), pp. 401–433;
- 172. Kogler, C., Baatrancea, L., Nichita, A., Pantya, J., & Belianin, A., (2013). Trust and power as determinants of tax compliance: Testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia. Journal of Economic Psychology, 34, pp. 169–180;
- 173. Krambia-Kapardis, M., (2002). *A fraud detection model: A must for auditors*. Journal of Financial Regulation and Compliance, Vol. 10, No. 3, pp. 266-278;
- 174. Lacusta, N., (2012). Elemente de drept penal comparat in materia infractiunii de contrabanda. Legea și viata, nr. 7;
- 175. Laffer, A.B., (2004). *The Laffer Curve: Past, Present and Future*. The Heritage Foundation. Backgrounder, 1765(1), pp. 1-16;
- 176. Letia, A., (2014). Unele consideratii asupra coruptiei si masurilor de combatere a acesteia, in special in domeniul afacerilor. Revista "Dreptul", (08), pp. 208-237;
- 177. Levi, M. & Wall, D., (2004). *Technologies, security, and privacy in the post 9/11 European Information Society*. Journal of Law and Society, 31(2), pp. 194-220;
- 178. Lubua, E.W., (2014). *Influencing tax compliance in SMEs through the use of ICTs*. International Journal of Learning, Teaching and Educational Research, 2(1), pp. 80-90;
- 179. Lv, Z., (2017). *Intelligence and corruption: An empirical investigation in a non-linear framework.* Journal of Behavioral and Experimental Economics, 69, pp. 83–91;
- 180. Mara, E.R., Inceu, A., Cuceu, I. & Achim, M.V., (2009), *The impact of economic crisis on the fiscal revenues*. Annals of Faculty of Economics 3(1), pp. 252-257;
- Mare, C., Dragos, S.L., Dragota, I.M. & Dragos, C.M., (2019). Insurance Literacy and Spatial Diffusion in the Life Insurance Market: A Subnational Approach in Romania. Eastern European Economics, 57(5), pp. 375-396;
- 182. Matthews, K. & Lloyd-Williams, J., (2001). *The VAT-evading firm and VAT evasion: an empirical analysis*. International Journal of the Economics of Business, 8(1), pp. 39-49;
- 183. Matthews, K., (2003). *VAT evasion and VAT avoidance: Is there a European Laffer curve for VAT?* International Review of Applied Economics, 17(1), pp. 105-114;
- 184. Mauro, P., (1995). Corruption and growth. The Quarterly Journal of Economics, 110(3), pp. 681-712;
- Mbarek, B., Ge, M. & Pitner, T., (2019). Self-adaptive RFID authentication for Internet of Things. In International Conference on Advanced Information Networking and Applications, pp. 1094-1105;
- 186. McAfee, (2018). *The economic impact of cybercrime- no slowing down*. Available at https://www.mcafee.com/enterprise/en-us/assets/executive-summaries/es-economic-impact-cybercrime.pdf. Accessed on 28'th Jan 2020;
- 187. Medina, L. & Schneider, F., (2018). *Shadow economies around the world: What Did we learn over the last 20 years?* International Monetary Fund Working Paper, WP/18/17;
- 188. Medina, L. & Schneider, F., (2019). *Shedding light on the shadow economy: A global database and the interaction with the official one*. Working papper, Econstor, pp. 2-38;
- 189. Mele, D., (2014). *Corruption: 10 possible causes*. Available at http://blog.iese.edu/ethics/2014/11/06/corruption-10-possible-causes/. Accessed on 10 Feb 2020.
- 190. Miri-Lavassani, K., Kumar, V., Movahedi, B. & Kumar, U., (2009). *Developing an identity fraud measurement model: a factor analysis approach*. Journal of Financial Crime, Vol. 16, No. 4, pp. 364-386;
- 191. Mocan, N., (2008). What determines corruption? International evidence from micro data. Economic Inquiry, 46(4), pp. 493-510;
- 192. Morrissey, O., Von Haldenwang, C., Von Schiller, A., Ivanyna, M. & Bordon, I., (2016). *Tax Revenue Performance and Vulnerability in Developing Countries*. The Journal of Development Studies, 52(12), pp. 1689-170;
- 193. Mottus, R., Guljajev, J., Allik, J., Laidra, K. & Pullmann, H., (2012). *Longitudinal associations of cognitive ability, personality traits and school grades with antisocial behaviour*. European Journal of Personality, 26(1), pp. 56-62;
- 194. Nitu, M, Paraschiv, D., Dumitrescu M.S., Florea, I.O., (2020). The Connection between Corruption and the Underground Economy. An Obstacle on Innovation and Development of the Business Environment. The Romanian Economic Journal, vol. 22(76), pp. 72-79;

- 195. North, C.M., Orman, W.H. & Gwin, C.R., (2013). *Religion, corruption, and the rule of law.* Journal of Money, Credit and Banking, 45(5), pp. 757-779;
- 196. OECD. (2002). *Measuring the non-observed economy: A handbook*. OECD Publications Service, Paris, France, pp. 1-249;
- 197. Okunogbe, O.M. & Pouliquen, V.M.J., (2018). *Technology, taxation, and corruption: evidence from the introduction of electronic tax filing (English)*. Policy Research Working Paper No. WPS 845. Impact Evaluation Series. Washington, DC;
- 198. Olabisi, J., (2010). An assessment of tax evasion and tax avoidance in Lagos, Nigeria. Journal of Research in National Development, 8(1), pp. 17–27;
- 199. Park, H. & Blenkinsopp, J., (2011). *The roles of transparency and trust in the relationship between corruption and citizen satisfaction*. International Review of Administrative Sciences, 77(2), pp. 254-274;
- 200. Payne, E. & Ramsay, R., (2005). Fraud risk assessments and auditors' professional skepticism. Managerial Auditing Journal, Vol.20, No. 3, pp. 321-330;
- 201. Pickhardt, M. & Prinz, A., (2014). *Behavioral dynamics of tax evasion*. A survey. Journal of Economic Psychology, 40, 1–19:
- 202. Pop, T., (1928). Curs de criminologie. Institutul de Arte Grafice", Ardealul;
- 203. Potrafke, N., (2012). Intelligence and corruption. Economics Letters, 109-114;
- 204. Queloz, N., (2002). Criminalité économique et criminalité organisée. L'Economie politique, (3), pp. 58-67:
- 205. Raczkowski, K., (2015). *Measuring the tax gap in the European economy*. Journal of Economics and Management, 21(3), pp. 58-72;
- 206. Radulescu, D.L., (2010). *The concept of money laundering in global economy*. International Journal of Trade, Economics and Finance, 1(4), pp. 354-360;
- 207. Richardson, G., (2008). *The relationship between culture and tax evasion across countries: Additional evidence and extensions.* Journal of International Accounting, Auditing and Taxation, 17, pp. 67–78;
- 208. Rindermann, H., (2018). *Cognitive capitalism: Human capital and the wellbeing of nations*. Cambridge University Press.
- 209. Robertson, D., (2016). The Nilson report. Available at: https://www.nilsonreport.com/upload/content-promo/The Nilson Report 10-17-2016.pdf. Accessed on 10'th Oct 2019.
- Romer, C. & Romer, D., (2007). The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks. Working paper 13264, http://www.nber.org/papers/w13264, National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge, MA 02138;
- 211. Ryman-Tubb, N.F., Krause, P. & Garn, W., (2018). How Artificial Intelligence and machine learning research impacts payment, card fraud detection: A survey and industry benchmark. Engineering Applications of Artificial Intelligence, 76, pp. 130–157;
- 212. Sadgali, I., Sael, N. & Benabbou, F., (2019). *Performance of machine learning techniques in the detection of financial frauds*. Procedia Computer Science, 148, pp. 45–54;
- 213. Sahakyan, N. & Stiegert, K.W., (2014). *Corruption and Firm Performance*. Eastern European Economics, 50(6), pp. 5–27;
- 214. Salahodjaev, R., (2015). *Intelligence and shadow economy: A cross-country empirical assessment*. Intelligence, 49, pp. 129–133;
- 215. Bahoo, S., Alon, I., & Paltrinieri, A., (2020), Corruption in the international business: A review and research agenda. International Business Review, Volume 29, Issue 4;
- 216. Schmölders, G., (1960). *Fiscal psychology: A new branch of public finance*. National Tax Journal, 12, pp. 340–345;
- 217. Schneider, F., (2005). Shadow economies of 145 countries all over the world: Estimation results of the period 1999 to 2003. The Brown Journal of World Affairs, 11(2), pp. 113-129;
- 218. Schneider, F., (2011). The shadow economy and shadow economy labor force: What do we (not) know? IZA Discussion Paper No. 5769;
- 219. Schneider, F., & Buehn, A. (2012). Size and development of tax evasion in 38 OECD Countries: What do we (not) know?, CESifo Working Paper no. 4004.
- 220. Schneider, F. & Buehn, A., (2016). Estimating the size of the shadow economy: Methods, problems and open questions. IZA Discussion Paper No. 9820;
- 221. Schneider, F. & Klinglmair, R., (2004), *Shadow economies around the world: what do we know?* Working Paper No. 0403. Universität Linz;
- 222. Schwarz, P., (2011). *Money launderers and tax havens: Two sides of the same coin?* International Review of Law and Economics, 31, pp. 37–47;
- 223. Shleifer, A. & Vishny, R.W., (1993). *Corruption*. The Quarterly Journal of Economics, Vol. 108, No. 3., pp. 599-617;

- 224. Simonovic, B. & Boskovic, G., (2016). Symbiosis of politics, the shadow economy, corruption, and organized crime in the territory of the Western Balkans: The Oase of the Republic of Serbia. In M. Edelbacher, P. C. Ktacoski, & B. Dobovsek (Eds.), Corruption, fraud, organized crime, and the Shadow economy, pp. 111–125, Boca Raton: CRC Press;
- 225. Sitorus, T. & Scott, D., (2009). *Integrated Fraud Risk factors and Robust Methodology: A review and Comment*. International Journal of Auditing, Vol. 13, pp. 281-297;
- 226. Slemrod, J., (1990). *Optimal taxation and optimal tax systems*. Journal of Economic Perspectives, 4, pp. 157–178;
- 227. Smith, P., (1994). *Assessing the size of the underground economy: The Canadian statistical perspectives*. Canadian Economic Observer, Catalogue No. 11-010, pp. 16–33;
- 228. Stati, V., (2014). *Infracțiuni economice: Note de curs*. Chișinău: CEP USM,, 529 pag., ISBN 978-9975-71-520-1
- 229. Tandean, V.A. & Winnie, W., (2016). The effect of good corporate governance on tax avoidance: An empirical study on manufacturing companies listed in IDX period 2010–2013. Asian Journal of Accounting Research, Vol. 1, Issue 1, pp. 28-38;
- 230. Tanzi, V., (1998). Corruption around the world: causes, consequences, scope and cures. IMF Staff Papers Vol. 45, No. 4, pp. 559=594;
- 231. Tanzi, V., (1999). Uses and abuses of estimates of the underground economy. The Economic Journal, 109, pp. 338–347;
- 232. Tarde, G., (1893). *Les transformations du droit*. Revue Philosophique de la France et de l'Étranger, 36, pp. 623-629;
- 233. Timofte, C. & Marian, S., (2019). Tax Evasion–from its roots to its branches. Ecoforum Journal, 8(1);
- 234. Tong, W. (2014). *Analysis of corruption from socio-cultural perspectives*. International Journal of Business and Social Science, 5(11(1)), pp. 9–19;
- 235. Torgler, B., & Schneider, F. (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, 30(3), 228–245.
- 236. Torgler, B., & Schneider, F. (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, 30(3), 228–245;
- 237. Torgler, B. & Schneider, F., (2007). *The Impact of Tax Morale and Institutional Quality on the Shadow Economy*. CESifo Working Paper No. 1899, Econstor;
- 238. Trabandt, M. & Uhlig, H., (2013). *How do Laffer curves differ across countries?* In A., Alesina, and F., Giavazzi, (Ed.). *Fiscal policy after the financial crisis*, A National Bureau of Economic Research Conference Report, University of Chicago Press, Chapter 6: pp. 211-249;
- 239. Trabandt, M. & Uhlig, H., (2006). *How far are we from the slippery slope? The Laffer Curve*", SFB 649 Discussion Paper, 2006–023 April 3, pp. 1–69;
- 240. Trandafir, A. & Brezeanu, P., (2010). *Optimalitatea politicii fiscale în România din perspectiva curbei Laffer*. Economie teoretică și aplicată, Vol. XVIII, 8(561), pp. 53-61;
- 241. Unger, B., (2013). Can money laundering decrease? Public Finance Review, 41(5), pp. 658-676;
- 242. Vaithilingam, V. & Nair, M., (2009). *Mapping global money laundering trends: Lessons from the pace setters*. Research in International Business and Finance, 23, pp. 18–30;
- 243. Wang, J., Zhou, J. & Peng, B., (2009). Weak signal detection method based on Duffing oscillator. Kybernetes, Vol. 38, No. 10, pp. 1662-1668;
- 244. Winnie, V.A.T., (2016). The effect of good corporate governance on tax avoidance: An empirical study on manufacturing companies listed in IDX period 2010–2013. Asian Journal of Accounting Research, 1, pp. 28–38;
- 245. World Bank Global Issues Seminar, (2005). *Series The Cancer of Corruption*. By Dr. Vinay Bhargava, Director, International Affairs, The World Bank, p. 1;
- 246. Zoldi, S., (2015). *Using anti-fraud technology to improve the customer experience*. Computer Fraud & Security, 7, pp. 18–20;

WEB

- 247. Agenția de Plăți și Intervenții în Agricultura, (2019). Subvențiile APIA Informatii utile. Finanțări Agricole, disponibil la https://finantariagricole.ro/stire/subventiile-apia-informatii-utile/.
- 248. Avocatnet.ro, (2009). Criminalitatea economico-financiara, inamicul nr. 1 al oamenilor de afaceri. Disponibil la https://www.avocatnet.ro/forum/discutie-57827/Criminalitatea-economico-financiara-inamicul-nr-1-al-oamenilor-de-afaceri.htm, accesat la data de 23.03.2020;
- 249. Comisia Europeană (2016). *Taxation trends in the European Union Data for the EU Member States, Iceland and Norway*. Disponibil la https://ec.europa.eu/taxation_customs/business/economic-analysis-taxation/taxation-trends-eu-union_en, accesat la 21 Februarie 2021;

- 250. Comisia Europeană, (2011). *Questions and Answers: Value Added Tax (VAT)*. Disponibil la http://europa.eu/rapid/press-release MEMO-11-874 en.htm?locale=en, accesat la 26 Aprilie 2020;
- 251. Comisia Europeană, (2013). Project 'ECOLEF' The Economic and Legal Effectiveness of Anti Money Laundering and Combating Terrorist Financing Policy. Project funded by the European Commission DG Home Affairs JLS/2009/ISEC/AG/087 February 2013, http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2013-0307+0+DOC+XML+V0//EN;
- 252. Consiliul European, (1981). *Recommendation no. R (81) 12 of Committee of Ministers to Member States on Economic Crime* (adopted by the Committee of Ministers on 25 June 1981 at the 335th meeting of the Minister's Deputies) document disponibil on-line la https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=600157&SecMode=1&DocId=672338&Usage=2, Enhancing SME Financial Statements, accessat online la 10 Ianuarie 2020, https://www.ifac.org/MediaCenter/?q=node/view/658;
- 253. Consiliul European, (1999). Convention pénale sur la corruption, disponibil la https://rm.coe.int/168007f3f8, accesat la 10 Ianuarie 2021:
- 254. Curtea de Conturi Euroeană, (2015). Raportul special Combaterea fraudei intracomunitare în domeniul TVA, 2015, nr. 24, https://www.eca.europa.eu/Lists/ECADocuments/SR15_24/SR_VAT_FRAUD_RO.pdf, accesat la 10 Februarie 2021;
- 255. DEX Online, (2020), disponibil la https://dexonline.ro/;
- 256. Dicţionarul Oxford Cambridge, (2021). Disponibil online la adresa https://definitions.uslegal.com/e/economic-crime/, accesat la 25 Ianuarie 2021;
- 257. Financial Action Task Force on Money Laundering (FATF), disponibil la http://www.fatf-gafi.org/about/;
- 258. Institutul Auditorilor Interni, Institutul American al Contabililor Publici Autorizați & Asociația Experților Autorizați în Investigarea Fraudelor, (2008). *Ghid practic-Gestionarea riscului de fraudă în afaceri*, disponibil la http://www.ifa-iaf.be/v1/frontEnd/libraryIfa/index.php? action=detail&id=29, accesat la http://europa.eu/rapid/press-release_MEMO-11-874_en.htm?locale=en, ultima accesare 26 Aprilie 2020;
- 259. Internal Revenue Service IRS USA, (2017). Disponibil la https://www.irs.gov/ accesat la 22 Februarie 2019;
- 260. Johnson, S., (2018). *The global economy loses \$3.6 trillion to corruption each year, says U.N.*. Disponibil la https://bigthink.com/politics-current-affairs/corruption-costs-world-3-6-trillion, accesat la 22 Februarie 2020;
- 261. Kaufman, D., (2010). Can corruption adversely affect public finances in industrialized countries? Washington, DC. Disponibil la https://www.brookings.edu/opinions/can-corruptionadversely-affect-public-finances-in-industrialized-countries/. Accesat la 7 Martie 2020;
- 262. Mele, D., (2014). *Corruption: 10 possible causes*. Disponibil online la adresa http://blog.iese.edu/ethics/2014/11/06/corruption-10-possible-causes/, accesat la data de 10 Februarie 2020;
- 263. OECD, (2008). *Corruption: A Glossary of International Standards in Criminal Law.* OECD Publications, 1-9. Disponibil la http://oecd.org/publishing/corrigenda;
- 264. OECD, (2020). Glossary of tax terms. Disponibil online la adresa https://www.oecd.org/ctp/glossaryoftaxterms.htm. Accesat la 20 Februarie 2020;
- 265. Oxford Dictionary, (2020). Disponibil la https://en.oxforddictionaries.com/. Accesat la 10 Februarie 2020:
- 266. PricewaterhouseCoopers, (2016). Global Economic Crime Survey 2016. Disponibil le <a href="https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/organized-crime-andhuman-trafficking/corruption/experience-sharing-programme/docs/o.iskit-global-economiccrime-survey en.pdf. Accesat la 10 Februarie 2020;
- 267. PricewaterhouseCoopers, (2018). *Pulling fraud out of the shadows Global Economic Crime and Fraud Survey*. Disponibil la https://www.pwc.com/gx/en/forensics/global-economiccrime-and-fraud-survey-2018.pdf. Accesat la 10 August 2019;
- 268. Schneider, F., (2013). Size and development of the shadow economy of 31 European and 5 other OECD countries from 2003 to 2013: A further decline. Disponibil la http://www.econ.jku.at/members/schneider/files/publications/2013/shadeceurope31_jan2013.pdf. Accesat la 10 Noiembrie 2019;
- 269. Schneider, F., (2015). Size and development of the shadow economy of 31 European and 5 other OECD Countries from 2003 to 2015: Different developments. Disponibil la

- http://www.econ.jku.at/members/Schneider/files/publications/2015/ShadEcEurope31.pdf. Accesat la 10 Noiembrie 2019;
- 270. Shuvaieva, I., Barbone, L., Bonch-Osmolovskiy, M. & Poniatowski, G., (2015). *Study to quantify and analyse the VAT gap in the EU member states* 2015 Report. CPB Netherlands Bureau for Economic Policy Analysis. Disponibil online la adresa http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/vat_gap2013.pdf. Accesat la 25 Octobombrie 2020;
- 271. Transparency International, (2017). Global corruption barometer: Citizen's voices from around the world.

 Disponibil online la adresa https://www.transparency.org/news/feature/global corruption barometercitizens voices from around the world. Accesat la 8 Iulie 2019:
- 272. Transparency International, (2020). *Corruption Perceptions Index*. Disponibil la https://www.transparency.org/en/cpi/2020/index/hrv;
- 273. United Nations Convention Against Transnational Organized Crime, (2000). *Palermo Convention*. Disponibil la http://www.undcp.org/adhoc/palermo/convmain.html;
- 274. US Legal, (2020). *Economic crime law and legal definition*. Disponibil online la https://definitions.uslegal.com/e/economic-crime/. Accesat la 15 Ianuarie 2020;

LEGISLATION

- 275. Constituția României 1991* republicată. Disponibilă online la adresa https://www.sri.ro/assets/files/legislatie/constitutia.pdf;
- 276. Decizia Curții Constituționale nr. 363 din 07.05.2015 publicată în Monitorul Oficial nr. 495 din 06.07.2015 prin care s-a admis excepția de neconstituționalitate a art. 6 din Legea 241/2005. Disponibilă la https://lege5.ro/Gratuit/g4zdembrgm/decizia-nr-363-2015-referitoare-la-admiterea-exceptiei-de-neconstitutionalitate-a-dispozitiilor-art-6-din-legea-nr-241-2005-pentru-prevenirea-si-combaterea-evaziunii-fiscale;
- 277. Directiva (UE) 2017/1371 a Parlamentului European și a Consiliului din 5 iulie 2017 privind combaterea fraudelor îndreptate împotriva intereselor financiare ale Uniunii prin mijloace de drept penal. Publicat în Jurnalul: L nr. 198 din 28 iulie 2017. Disponibila la https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=CELEX%3A32017L1371;
- 278. Directiva 2005/60/CE a Parlamentului European și a Consiliului din 26 octombrie 2005 privind prevenirea utilizării sistemului financiar în scopul spălării banilor și finanțării terorismului (JO L 309, 25.11.2005, p. 15). Disponibila la https://eur-lex.europa.eu/legal-content/RO/NIM/?uri=CELEX:32005L0060;
- 279. Directiva 2006/112/CE a Consiliului din 28 noiembrie 2006 privind sistemul comun al taxei pe valoarea adăugată (consolidată la 1 iunie 2016) Publicat în Jurnalul: L nr. 347 din 11 decembrie 2006. Disponibila la adresa https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:02006L0112-20160601;
- 280. Directiva 2009/110/CE a Parlamentului European și a Consiliului din 16 septembrie 2009 privind accesul la activitate, desfurarea și supravegherea prudenial a activitii instituiilor emitente de moned electronic, de modificare a Directivelor 2005/60/CE i 2006/48/CE și de abrogare a Directivei 2000/46/CE (JO L 267, 10.10.2009, p. 7). Disponibila la https://pdfslide.tips/documents/directiva-2009110ce-a-parlamentului-european-i-a-consiliului-.html;
- 281. Legea 27/2012 pentru modificarea și completarea Codului penal al României. Disponibila la http://legislatie.just.ro/Public/DetaliiDocumentAfis/136303;
- 282. Legea nr. 8 din 14 martie 1996 (*actualizată*) privind dreptul de autor și drepturile conexe. Disponibilă online la http://legislatie.just.ro/Public/DetaliiDocument/122257;
- 283. Legea nr, 129/2019 pentru prevenirea și combaterea spălării banilor și finanțării terorismului, precum și pentru modificarea și completarea unor acte normative. Disponibila la http://www.onpcsb.ro/legislatie-onpcsb/legea-nr-129-11-07-2019-pentru-prevenirea-si-combaterea-spalarii-banilor-si-finantarii-terorismului-precum-si-pentru-modificarea-si-completarea-unor-acte-normative;
- 284. Legea nr. 227/2015* actualizată privind Codul fiscal. Disponibila online la adresa https://static.anaf.ro/static/10/Anaf/legislatie/Cod fiscal norme 11022020.htm;
- 285. Legea nr. 241/2005 * *actualizată*, pentru prevenirea și combaterea evaziunii fiscale. Disponibila la http://legislatie.just.ro/Public/DetaliiDocument/63590;
- 286. Legea nr. 31/1991* republicată privind societățile comerciale. Disponibila online la http://www.onrc.ro/documente/legislatie/noi/legea_nr_31_modif_26.10.2011.pdf;
- 287. Legea nr. 46/2008* actualizată privind Codul silvic. Disponibila online la http://legislatie.just.ro/Public/DetaliiDocument/90768;

- 288. Legea nr. 50 /1991 (**republicată**) privind autorizarea executării lucrărilor de construcții. Disponibilă online la http://legislatie.just.ro/Public/DetaliiDocument/55794;
- 289. Legea nr. 78/2000* actualizată pentru prevenirea, descoperirea și sancționarea faptelor de corupție. Disponibila la http://legislatie.just.ro/Public/DetaliiDocument/22361;
- 290. Legea nr. 144/2014, pentru aprobarea Ordonanței de urgență a Guvernului nr. 74/2013 privind unele măsuri pentru îmbunătățirea și reorganizarea activității Agenției Naționale de Administrare Fiscală, precum și pentru modificarea și completarea unor acte normative. Disponibilă online la http://legislatie.just.ro/Public/DetaliiDocumentAfis/162445
- 291. Legea nr. 86/2006* actualizată privind Codul vamal. Disponibila online la adresa http://legislatie.just.ro/Public/DetaliiDocumentAfis/70964