An Analysis of the Determinations of Tax Evasion
from the Financial - Accounting Perspective

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Abstract

The interest for tax evasion is a perennial one with interdisciplinary approaches from the legal, economic, sociological and psychological spheres, both from a practical and theoretical point of view. Economic development have led to an adaptation of tax evasion on different levels. The economic crisis of 2009 has increased taxpayers' inclination to pay less taxes and fees. In his turn, the state sought new ways to bring money to the state budget. This is why the tax evasion phenomenon has gained new attention from theorists and practitioners, acquiring multidimensional valences.

The chosen theme has its source in the heterogeneity of the study modes, which is of current interest to all the governments of the world, always looking for solutions and ways to combat tax evasion.

Key words: "tax evasion", "tax avoidance", "underground economy"
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1. Introduction

Research in the field highlights that, increased tax pressure causes the taxpayer not to pay taxes or pay less, or not to declare income, towards a black economy, towards tax evasion. In identifying the determinants that produce and maintain this phenomenon through the accounting mechanisms, the main purpose is to find the evasion behavior as a determining factor, which represents a risk factor of the financial-fiscal security of Romania like as a consequence, as well as to identify a sociopsychological interactive model for the analysis specific behaviors of tax evasion.

Inspired by the economic and social reality of Romania, the article presents the determinants, the forms of manifestation and the consequences of fiscal evasion, of the parallel economy and of the influences caused at the macroeconomic level by the underground economy.

This was achieved through a fundamental, theoretical, qualitative and quantitative research, grouped on empirical and theoretical studies with the presentation of some exemple. Following the analysis with the help of tools - criterion, were presented determinants able to show the size of the omission from the mandatory declaration.

As a ubiquitous phenomenon, we find fiscal evasion in various proportions in all states, and those with a high degree of evasion also have a weak economic.

Its universality is explained by the fact that it exists at all types of societies and social classes and is a problem in a continuous debate by all countries.

The complexity and magnitude of the phenomenon of tax evasion in the current economy requires the study at both global and national level, macro and microeconomic, justified by the fact that tax evasion under the current conditions has become a component of the economic system.

2. Literature review

Precise instruments for measuring the extent of tax evasion do not exist, although they are numerous due to practical difficulties. Some of these tools are based on approximate methods, and others use a more precise method based on sample survey.

In this sense, the specialized literature presents some contradictory results. A special contribution is made by Schneider's study, which looks at the relationship between tax evasion and the economy as being dependent on the degree of economic development of a country. For developing countries, the link between the economy and tax evasion is a negative and positive one for the countries in transition. This makes evasion potentially pro-cyclical for transition countries and counter-cyclical for developing countries.

Schneider argues this observation by the fact that in high-income countries, taxpayers are overwhelmed by taxes and tax regulations. Thus, the development of the underground economy leads to the boost of the real economy, and the revenues obtained from evasion will help in the official economy. In developing countries where incomes are lower, increasing tax evasion will shrink the tax base, and the negative effects will be reflected in the quality of public services and goods.

3. Types of tax evasion determinants

Institutional factors play a major role in influencing the tax evasion behavior of companies, this finding also has important political implications. Tax evasion not only affects the state, but imposes numerous economic costs on all companies and affects the social life by providing low social products and services (health, education, etc.). First, it slows down the economic growth that is reflected in the weak management of public institutions, in infrastructure, research, in services and public goods. Also, the money will be directed towards non-productive activities or the establishment of companies that hide the evasion. And last but not least, an injustice will be created between those who pay and those who don't pay. Fiscal burden being supported by those who comply with the legislation.

Inspired by Mirrlees's (1971) studies of taxation and risk, some authors such as Michael G. combine portfolio and policy assurance studies with studies of the economics of criminal activity or the economics of uncertainty to develop a model of a taxpayer's decision to comply voluntarily. The model assumes that the decision factor regarding the value of undeclared tax revenues manifests itself in conditions of uncertainty. Whether it risks being controlled or not or whether it will be sanctioned.

Other authors assume that the decision-maker is a rational one in the face of risks, but even in these conditions when the taxpayer must declare the income is inclined to dishonesty. That is, the decision to report is isolated from the impact on the environment, the community, the state or even regret, guilt or shame. According to these assumptions, there is a negative link between the probability of control, the degree of evasion and the degree of fine.

But, when analyzing the extent of tax evasion with the help of tax rates, the model shows an ambiguous effect on the income. As tax rates increase, taxpayers become poorer and the percentage of taxpayers who do evade it is smaller. And a substitution effect, when tax rates increase, taxpayers are more inclined towards evasion, choosing a higher risk than a safer choice. Yitzhaki (1974) argued that the ambiguous effect was as a result of an unrealistic assumption of the conforming model. He considers that the penalty is levied on the value of the income and not on the value of the report.

Some opinions relate to a "Kantian" moral, where taxpayers have feelings of "guilt" or "inferiority" if they pay less than it is right.

Within the rules and moral sentiments, several other studies have advocated for the incorporation of socio-cultural factors that show that taxpayers doing illegal activities are more inclined to disagree.

Another author presents, a small stigma effect that manifests when most taxpayers evade, but evasion is not discouraged. As the percentage of work at black increases, the social stigma weakens and more taxpayers are inclined towards evasion.

Hanousek and Palda (2004) presented tax evasion as a legitimate way of revolt of taxpayers towards the state due to the negative perception on the state.

Another opinion presents the tax evasion seen as a "vote" against the government, when taxpayers perceive government, as like irresponsible and corrupt.

Following the analyzed studies the determining factors of tax evasion are divided into traditional and non-traditional factors.

„Traditional determinants"

„Tax rate	*Ambiguu*
Audit rate	*Negative*
Fine rate	*Negative"*

„Non-traditional determinants"

„Morality	*Negative*
Socio-Cultural	Ambiguu
Righteousness	Negative
Trust	Negative
Compliance costs	Pozitive
Company characteristics	Ambiguu"

The fight against evasion is a recurring theme in many countries. The dominant method is to increase the degree of discouragement. The probability of identifying tax evasion situations is high, if more frequent and intense checks are carried out. The sanctioning of the tax evasion situations must be achieved by applying higher fines and in serious cases with the prison sentence. The objectives are for both suppliers and buyers of services and goods in the underground area.

The success of such discouragement policies is quite unsafe. In the situation of the underground sector related to drugs, prostitution and the prohibition of alcohol, the effect proved to be the weakest, if not counterproductive. Many people in the area of evasion go deeper into illegality to make detection even more difficult. As a result, illicit activities become complex, harder to observe and influence. A positive approach involves increasing the motivation to comply with the law, by improving public management, reducing the tax burden and social security imposed on work and / or by increasing civic morality. Many decision-makers doubt that these measures work, and they are only effective in the long run.

One possibility is to adapt the public (legislative) offer more closely to what taxpayers want and to reduce costs for a certain quantity and quality of services and goods. An aspect that can be improved by streamlining public sector activities (for example, a new public administration).

4. Research methodology - Qualitative and quantitative analysis of the determinants of tax evasion

The structuring of the theoretical notions regarding the fiscal evasion from the financial-accounting perspective was realized with the help of an in-depth study on the academic studies in the area of interest regarding the phenomenon of fiscal evasion. By means of the meta-analysis of the specialized works, a structuring of the theoretical notions regarding the fiscal evasion from the financial-accounting perspective was outlined.

Thus it was proceeded to:
- delimiting a sample of articles through the Science Direct and Cambridge Journals databases;
- delimitation of the analyzed period: 2008 - 2018;
- delimiting the sample of articles using the keywords: "*tax avoidance*", "*tax evasion*", and "*underground economy*";
- establishing the search criteria specific to each database.

Following the establishment of these search criteria on the databases, a number of 1.337 articles were identified that were subjected to study.

The study and analysis of articles was carried out transversally and longitudinally. Longitudinally was followed the evolution of concepts, theories, laws and definitions of tax evasion and cross-sectional, by comparing the indicators that influenced the size of tax evasion, as well as the determinants.

From the perspective of research currents of the specialized literature, the phenomenon of fiscal evasion is predominantly positioned within the critical and positivist current, following a detailed approach of the concepts, hypotheses and practices of manifesting the fiscal evasion. Analyzing concepts, studies, theories, laws and practices were also identified elements of the interpretive current, involving a particular point of view or disagreements of opinions through the empirical study.

Starting from this analysis the methodology used in this study is based on theoretical (deductive, descriptive-conceptual), fundamental, qualitative (descriptive-conceptual) and quantitative (empirical, deductive and inductive) research. In terms of qualitative research, this was done from a theoretical, descriptive - conceptual perspective, with examples from the specialized literature and the various typologies of accounting and fiscal behaviors.

5. Findings

Following the application of the search criteria, 1,337 articles from the Science Direct and Cambridge Journals databases were obtained and the following results were obtained:
- **516 articles from the Science Direct** database, respectively a 39% percentage formed of: 270 articles for the expression „tax evasion", 131 articles for the expression „tax avoidance" and 115 articles for the expression „underground economy";
- **821 articles from the Cambridge Journals** database, respectively a 61% percentage formed of: 143 articles for the expression „tax evasion", 223 articles for the expression „tax avoidance" and 455 articles for the expression „underground economy"
A new grouping was made based on the search phrase:
- after the expression „tax evasion" – 413 articles, respectively a percentage of 31%;
- after the expression „tax avoidance" – 354 articles, respectively a percentage of 26%;
- after the expression „underground economy" – 570 articles, respectively a percentage of 43%.

4nest the publication of articles in both databases, those that were duplicated were eliminated, respectively 209 articles. The articles was reduced from 1.337 to 1.128 articles.

The study of summaries and the search within the articles of the three search terms with the help"search" function, led to a new elimination of articles that were not relevant. The articles was reduced from 1.128 items to 409 items and a new grouping was obtained:
1. Articles after the search expression "tax evasion": 188 articles, respectively a percentage of 45.95%;
2. Articles after the search expression "tax avoidance": 67 articles, respectively a percentage of 16.36%;
3. Articles after the search expression "underground economy": 15 articles, respectively a percentage of 3.7%;
4. Articles after the search expressions "tax avoidance" and "tax evasion": 83 articles, respectively a percentage of 20.29%;
5. Articles after the search expressions "underground economy" and "tax evasion": 35 articles, respectively a percentage of 8.6%;
6. Articles after the search expressions "tax evasion", "underground economy" and "tax avoidance": 5 articles, respectively a percentage of 1.2%;
7. Articles that do not contain the search expression, but are relevant to our research: 15 articles, respectively a percentage of 3.9%;
8. Articles that contain the search expression, but are not relevant to our research: 27 articles.
9. Articles that do not contain any search expresions and are not relevant to our research: 693 articles.

The grouping of articles from number 1 to number 7 totaled 409 articles and are the 4nest hat were used later in the study.

It was observed that most articles related to the study of the determinants of tax evasion were found after the search expression „tax evasion", respectively 188 articles and the fewest articles after the 3 search expressions, „tax evasion", " underground economy" and „tax avoidance", respectively 5 articles.

The last step in the selection of the sample of articles involved a qualitative analysis of them through their examination to ensure that they are relevant for the present study and that they have been published in representative journals. The studies dealing with the qualitative analysis of the journals, the study „Impact factor", published on the website of UEFSCIDI (Executive Unit for the Financing of Higher Education Research, Development and Innovation) were analyzed, the latest revised list „The list of journals in based on the non-impact factor (IF), according to the JCR 2017, June 2018 edition indexed in the Science Citation Index Expanded or Social Sciences Citation Index;

According to this study, the 409 articles analyzed in detail were published in 117 journals, of which 75 are quoted according to the analyzed studies, respectively a percentage of 62%.

Table no. 1 The first three journals with the highest number of publications:

JOURNALS				IMPACT FACTOR	
No.	Name Journal	No. Articles	ISSN	Distribution of journals within ratings	TOP
1	J. of Public Economics	32	0047-2727	1	87
2	J. of Economic Psychology	29	0167-4870	2	137
3	J.of Economic Behavior & Organization	21	0167-2681	2	144

Source: own projection

Thus, the process of analyzing the specialized literature involved the following steps:
1. Selecting databases with a representative number of articles in the targeted field;
2. Delimitation of the analyzed period;
3. Defining the search keys by the three expressions;
4. Establishing the search criteria;
5. Elimination of duplicate articles;
6. Summary analysis of articles by reading abstracts and using the search function;
7. Analysis of journals and articles by reading and studying them.

The quantitative analysis and the classification of the analyzed articles was done with the help of defining the following selection criteria according to:
1. Criterion that analyzes the **author:** articles with a single author, articles with several authors, author with several articles;
2. The criterion that analyzes the **article**: the journal, the year of publication, the field, the research topic and the geographical area regarding the affiliation of the authors;
3. The criterion that analyzes the research **methodology**: the research perspective, the research current and the theory.

1. The criterion that analyzes the author includes articles that have a single author, - 111 articles, respectively a percentage of 27%; and articles with multiple authors - 298 articles, respectively 73%

The **articles that have several authors** in the analyzed sample respectively 298 articles, are grouped by the number of authors as follows:
• 144 articles with 2 authors;
• 100 articles with 3 authors;
• 11 articles with 4 authors;

• 9 articles with 5 authors;
• 3 articles with 6 authors;
• 2 articles with 7 authors;
• 1 article with 8 authors.

Multi-article author criterion: includes authors who have written several articles in the analyzed sample. 81 authors were identified from the 940 authors with several articles, of which:

• 2 authors published 11 articles;
• 1 author published 7 articles;
• 1 author published 6 articles;
• 6 authors published 5 articles;
• 5 authors published 4 articles;
• 12 authors published 3 articles;
• 54 authors published 2 articles.

According to this criterion analyzing the author it can be observed that the number regarding the study of a*uthors who wrote a single article* on the determinants of tax evasion is much higher (859 authors, respectively 92%), *than of the authors who wrote more articles* (81 authors, respectively 8%) regarding the two analyzed databases.

2. The criterion analyzing the article includes the year appearance of the articles, the list of journals where they were published, the field of which they are part, the topic of research in which they fall and the geographical area of affiliation.

2.1 The year of appearance - presents the number of articles published per years from the sample analyzed.

The fewest articles were published in 2009, respectively a number of 17 articles. The first 4 years of the analyzed period, 2008 - 2011 contain the smallest number of published articles (between 17 and 19 articles), following an increase of the publication of the articles until 2014 when a maximum number of 63 articles is reached. From 2015 to the end of the period in 2018, the number of publishers per year decreases to 38 articles.

2.2. The journal - the objective is to find the journals with the most articles published.

This criterion includes the journals in which the articles in this study were published. The first journals with the most number of publications are:

- "Public Economics" with 32 articles, listed "ISSN (0047-2727)", has a rating of 1 and is in the top 87;

- "Economic Psychology" with 29 articles, quoted "ISSN (0167-4870)", has a rating of 2 and is in the top 137;

- "Economic Behavior & Organization" with 21 articles, quoted "ISSN (0167-2681)", has a rating of 2 and is in the top 144;

- "Procedia - Social and Behavioral Sciences" with 16 articles;

- "Journal of Economic Analysis & Policy" with 14 articles;

- "Journal of Economics Letters" with 14 articles, quoted ISSN (0165-1765), has a rating of 3 and is in the top 279;

- "Procedia Economics and Finance" with 13 articles;

- "Journal of Economic Modeling" with 12 articles, quoted ISSN (0264-9993), has a rating of 2 and is in the top 102;

- "Journal of Financial Economics" with 11 articles, listed ISSN (0304-4058), has a rating of 1 and is in the top 9;

- "Critical Perspectives on Accounting" with 10 articles, rated ISSN (1045-2354), has a rating of 1 and is in the top 7.

According to the results of the "Journal of Public Economics" has   most topics on tax evasion, 32 articles. This journal are relevant of the "Non-impact factor", published on the UEFSCIDI website according to which it is rated ISSN (0047-2727), has a rating of 1 and is in the top 87. But the journal that has the best place in the top is " Critical Perspectives on Accounting "with 10 articles, top 7 and rating 1. There are also journals that are rated ISSN according to the" Non-impact factor ", published on the UEFSCIDI website.

2.3. The field of research - from the study and analysis of the articles a grouping was carried out on the following fields:

- *economic-financial analysis* (financial and fiscal audit);
- *accounts* (empirical investigations, accounting doctrines, accounting policies, accounting and taxation - connection or disconnection);
- *taxation* (empirical investigations, legislation, fiscal doctrines, economic crime, tax evasion and underground economy);
- *evasion* (conceptual framework, theory, strategies, objectives, taxation versus accounting, the relationship between tax evasion, culture, ethics and social identity, theoretical approaches and quasi-experimental evidence, tax havens);
- *finance* (cost of loans, financing with European funds, investor protection);
- *corporate governance* (the impact of reporting real performance on large firms on the capital market and economy, the effect of the crisis on corporations);
- *general economy* (regulation and deregulation in the financial accounting of economic entities and their behavior, underground economy, taxpayer education);
- *political economy* (doctrines, corruption and anti-corruption, underground economy, tax evasion in the context of political uncertainty).

The study of the research domain of the 409 articles showed that most articles are within the scope of tax evasion, respectively 189 articles, followed by the accounting domain with 66 articles, the general economy domain with 64 articles, the taxation domain with 28 articles , the domain of finance with 16 articles, corporate governance with 16 articles, the political economy with 16 articles and the field of economic and financial analysis with 14 articles. Dominant as subjects of the research on the determinants of tax evasion are the domain of tax evasion and accounting that are closely connected with connection and influence on the functioning and applicability.

2.4. Research topic - after reading and studying the articles, these were grouped into the following main research topics:
- *manipulation of results through accounting mechanisms* (transfer revenues, non-reconciliation of accounts, deferment of taxes, concealment revenues, re-importation of goods);
- *taxation* (profit, VAT, tax planning);
- *financial-accounting evasion* (capital offenses, omission of records, fictitious operations, economic crime, tax havens, offshore companies, schemes and methods of evasion, dimensions, trends, implications, types and forms of manifestation of tax evasion, causes and effects, ways to combat tax evasion);
- *control* (internal control, tax inspections, audit, control body independence, predictability of tax evasion);
- *fiscal administration* (fiscal coordination, legislation, tax reform, voluntary declaration, taxpayers' informality, delimitation of the tax base, avoidance of double taxation, fiscal morale, economic collection and stimulation, tax amnesties, fraud detection systems and operational solutions, fiscal elasticity, stimulation of participation in taxation and fiscal pressure);
- *accounting* (connection and disconnection with taxation, fiscal resistance, illicit trade, accounting policies, non-reconciliation of accounts, income, expenses, manipulation of results, taxonomies of accounting to other fields, fictitious transactions, cost of loans);
- *information security* (computer crime and computer errors, fraud detection models).

The research topics most frequently approached were from the sphere of financial-accounting evasion, 167 articles, followed by the topic of tax administration with 81 articles, the topic of taxation with 65 articles, the topic of accounting with 36 articles, the theme of manipulating results through mechanisms accounting with 34 articles, the theme of control with 20 articles and the theme of information security with 6 articles. According to this classification, it can be observed that the determinants of tax evasion have a larger proportion in the area of financial-accounting evasion, tax administration and taxation.

2.5. Geographic area. This was done by delimiting the authors of each article at the country where each author belongs.

56 countries were identified, of which the first three countries with the highest number of affiliates are: USA with 128 affiliated authors, UK with 57 affiliated authors and Italy with 54 affiliated authors. According to the ranking *Romania ranks 10th out of 56, with 11 affiliated authors*. Even if the US is not in the top of the tax evasion ranking, it has the highest share of authors who have studied this phenomenon.

3. The criterion that analyzes the research methodology
Three criteria were identified that analyze the research methodology:
1. the current criterion: it includes the articles that fall into the three research specific currents: the *critical current,* the *interpretive current* and the *positivist current*;
2. theory criterion: delimits whether the articles in the sample refer to *an economic theory* or *do not refer to any theory;*
3. the perspective criterion: it delimits the articles according to the *theoretical* perspective and the *empirical* perspective.

The predominant research current is the *critical* one *(184 articles)* with *interpretative-positivist* influences (*64 articles - 161 articles*), because it involves a detailed explanation of the negative, conceptual and practical aspects at national and world.

Followed by the interpretative current with 64 articles, they also present a positive part of the tax evasion. And namely, the real economy and the underground economy, support one another in the economy growth.

But this manifestation is also as a reaction to the limits of the positivist current based on the empirical research and the different hypotheses formulated.

Regarding the research perspective, the **theoretical current** prevails in a proportion of 74% (*301 articles*), compared to the **empirical current** which is 26% (*108 articles*).

Regarding the theory criterion most **articles do not present any theory**, *258 articles*, compared to *151 articles* which refer to **one or more theories.** From the analysis of these articles, there is an increasing interest for the practical cases in the field with the testing of various theories and hypotheses in the economic reality, respectively *regarding the transition from a qualitative research to a quantitative research.*

6. Conclusions

The state through the public powers which exercises can incite tax evasion in a positive or negative sense. The positive one to help the capital formation and the negative one by supporting some interest groups.

Tax evasion has always been condemned, but the manifestation of this phenomenon has not been eradicated over time, reaching only higher or lower quotas in all countries, regardless of the sanctions applied, conventions and agreements concluded. The imperfect fiscal policies that sometimes present contradictions cause the companies to abuse the legislative provisions that benefit them the most, bypassing a tax or placing this obligation in the future even until unpaid depending on their abilities or knowledge.

Placing these companies in the shelter of the law involves a good accountant or expert and a good lawyer, costs that are not to be neglected and makes this type of evasion specific to large companies with large turnover.

Over time, it has been demonstrated, studied and analyzed this scourge called evasion, how bad and harmful it is for the economy and society in general, but if it is such a great evil, for which all nations struggle, *why not a high priority was given in combating this phenomenon*? *Why were not well-prepared and equipped institutions built*? *Or is it a necessary harmful*? *And if so, why*?

7. References

- Allingham, M., Sandmo, E.A., 1972. Income tax evasion: a theoretical analysis. *J. Public Econ.* 1.
- Alm, J., McClellan, N., 2012,.*Rethinking the Research Paradigms for Analyzing Tax Compliance Behavior.* Tulane University Department of Economics.
- Alm, J., Togler, B., 2011. Do Ethics Matter? Tax Compliance and Morality. Journal of Business Ethics, July, Volume 101.
- Andreoni, J., Erard, B., Feinstein, E.J., 1998. Tax compliance. *J. Econ. Lit.* 36.
- Anitei, N. C., Lazar, R. E., 2013. *Evaziunea fiscala intre legalitate si infractiune.* Iasi: Lumen Publishing House.
- Balaban, C., 2006. *Evaziunea fiscală. Aspecte controversate de teorie şi practică judiciară,* Bucharest: Rosetti Publishing House.

- Berheci, M., 2015. *Valorificarea raportărilor financiare. Sinteze contabile: teorie, analize, studii de caz.* Bucharest: CECCAR Publishing House.
- Buziernescu, R., 2007. *Evaziunea fiscală internă şi internaţională*. Craiova: Universitaria Publishing House.
- Chau, G., Leung, P., 2009. A critical review of Fischer tax compliance model: a research synthesis. *J. Account. Tax.* 1 (2).
- Cowell, F., 1990. *Cheating the Government*. Cambridge: MIT Press,.
- Krumplyte, J., 2016. Complex Research on Undeclared Work: Theoretical Aspects and Empirical Application in Lithuania. *Engineering Economics,* Vol. 21, no. 3.
- McMechan, R., 2013. *Economic Substance and Tax Avoidance: An International Perspective*. Publisher Carswell.
- Schneider, F., Raczkowski, K, Mroz, B., 2015. Shadow economy and tax evasion in the EU. *Journal of Money Laundering Control,* Vol. 18.
- Torgler, B., 2007. *Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis.* Cheltenham UK.: Edward Elgar.
- Torgler, B., 2011. *Tax Morale and Compliance. The World Bank, Europe and Central Asia Region.*
- World Bank, 2017. *Drumul spre Europa - Program de Reformă a contabilităţii şi de întărire Instituţională.* In Chambre of Financial Auditors from Romania, 2007. Attachement to *Auditul financiar*, no. 4 /2007