Routledge
Taylor & Francis Group

Economic Research-Ekonomska Istraživanja

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rero20

Determinants of tax avoidance – evidence on profit tax-paying companies in Romania

Mihaela Mocanu, Sergiu-Bogdan Constantin & Vasile Răileanu

To cite this article: Mihaela Mocanu, Sergiu-Bogdan Constantin & Vasile Răileanu (2021) Determinants of tax avoidance – evidence on profit tax-paying companies in Romania, Economic Research-Ekonomska Istraživanja, 34:1, 2013-2033, DOI: 10.1080/1331677X.2020.1860794

To link to this article: https://doi.org/10.1080/1331677X.2020.1860794

Published online: 08 Jan 2021.

ECONOMIC RESEARCH-EKONOMSKA ISTRAŽIVANJA
2021, VOL. 34, NO. 1, 2013–2033
https://doi.org/10.1080/1331677X.2020.1860794

Determinants of tax avoidance – evidence on profit tax-paying companies in Romania

Mihaela Mocanu, Sergiu-Bogdan Constantin and Vasile Răileanu

Department of Accounting and Auditing, The Bucharest University of Economic Studies, Bucharest, Romania

ABSTRACT

Our objective is to investigate the determinants of tax avoidance in Romanian companies in 2013–2017. Our initial sample comprises 236 privately owned companies that are payers of profit tax and have been found guilty of tax evasion. This was matched with 236 'compliant' companies structured similarly by industry, whereas the final sample comprises 1674-year-observations. We defined 'compliant' those companies that have never been prosecuted for tax evasion. Our main finding is that larger companies with lower financial performance and lower leverage ratio are more inclined towards tax avoidance. The geographical region and the industry sector in which companies operate in are also determining their tax avoidant-behaviour. Surprisingly, the fiscal regulations amended starting with 2016 did not lead to an apparent exacerbation of tax avoidance among profit tax payers.

ARTICLE HISTORY
Received 26 May 2020
Accepted 3 December 2020

KEYWORDS
Profit tax; tax avoidance; tax evaders; Romania; determinants

JEL CLASSIFICATION:
H26; G33; M49

1. Introduction

Tax avoidance is of great importance because it restricts state's ability to collect money and to put policies into practice as taxpayers find ways to reduce their taxable base. This is the reason why investigating the determinants of tax avoidance has been an important concern in the accounting field for the past two decades (Halioui et al., 2016). Governments conduct fiscal policies to make laws complete and accurate and to fight against tax evasion because of their need for tax revenues (Martinez, 2017). At the same time, when doing business, companies around the world minimise tax liabilities through tax aggressive activities (Lanis & Richardson, 2012; Martinez, 2017).

Different terms are relevant in the context of our study. Hanlon and Heitzman (2010) define tax avoidance very broadly. If tax avoidance represents a continuum of tax planning strategies, at the lower end we have perfectly legal tax reducing strategies, while terms such as 'noncompliance,' "evasion,' and 'sheltering' would be closer

CONTACT Sergiu-Bogdan Constantin c.sergiu.b@gmail.com Department of Accounting and Auditing, The Bucharest University of Economic Studies, Piaīa Romană 6, Sector 1, Bucharest 010374, Romania.

to the other end of the continuum. For our research purposes, we define tax evasion as tax aggressiveness outside the boundaries of the tax law, while tax aggressiveness within the boundaries of the tax law is in our view tax avoidance. More precisely, tax evasion is 'the wilful attempt to defeat or circumvent the tax law in order to illegally reduce one's tax liability' (Gottschalk, 2010). In other words, tax evasion is pecuniary and criminally sanctioned (Constantin, 2014). On the other hand, by definition, tax avoidance is the lawful underreporting of tax obligations (Lipatov, 2012). Tax avoidance is the legally avoiding of stating and paying taxes to the state budget. Tax avoidance consists in escaping taxes by legal means using legislative gaps in taxpayers' favour (the so-called 'loopholes'), and therefore it is only possible when the law is incomplete or has inaccuracies.

The academic literature on tax avoidance in Romania is rather scarce. Romanian authors prefer to focus on tax evasion: its definition, its causes, its forms, its effects, as well as the ways of preventing and fighting it (Comândaru et al., 2018; Constantin, 2016; 2018; Corîci &Ilincuīa, 2017; David & Pojar, 2011; Manea, 2011; Perpelea & Beldiman, 2016; Popescu & Cochinţu, 2014; Socoliuc et al., 2018; Şuvelea, 2014; Ungureanu et al., 2016). The reason for this growing concern for tax evasion is the increased frequency of scandals regarding corrupt state officials involved in tax evasion crimes (Manea, 2015) and the inefficiency of the fiscal supervision performed by tax authorities in Romania (Pana, 2019). However, at international level, many recent studies focused on understanding the corporate taxpayers' behaviour and especially companies' tax avoidant behaviour (Chen et al., 2010; Chen & Chu, 2005; Desai & Dharmapala, 2006; 2009a; 2009b; Frank et al., 2009). An issue that remains unsolved in the academic debate is the adequate measurement construct for tax avoidance. A review of tax research by Hanlon and Heitzman (2010) criticises 12 (twelve) measures used as a proxy of corporate tax avoidance by various authors along the years.

The objective of our research was to investigate the determinants of tax avoidance of companies headquartered in Romania over a five-year period (2013 through 2017). Our sample includes evading companies (companies that were prosecuted and found guilty for engaging in tax evasion in the analysed timeframe) and a matched group of compliant companies (for which no such prosecution existed).

The novel character of our approach consists in the fact that we include in our sample tax evasion perpetrators. Moreover, to the best of our knowledge, no other authors investigate the determinants of tax avoidance at company-level in Romania. Another element of novelty is that we do not limit our study to the tax-avoidant behaviour of listed companies. Most of the prior international studies only analysed the behaviour of public entities, which in our opinion is rather restrictive (Buijink et al., 1999; Chennells & Griffith, 1997; Collins & Shackelford, 1995). Moreover, earlier studies (e.g., Siegfried, 1972) used industry-level data to their disadvantage: companies' business typically spans many different industry groups and aggregated industry data obscure differences among individual companies' (Stickney & McGee, 1982). In our study, we use company-level data, which provides more insightful results. The relevance of our sample and the fact that this area of research received little attention in Romania make the contribution of our study particularly

significant. Our conclusions could also be useful to those interested in the corporate tax avoidance phenomenon in countries with a similar historic background such as ours.

Our paper has the following roadmap. The first section presents relevant studies published both in Romania and internationally. The next section describes the data collection process and offers arguments in favour of the chosen hypotheses. Following, we present the econometric results, as well as robustness checks. The last section highlights the major conclusions, the limits and the implications of our study.

2. Literature review

Corporate tax avoidance has been investigated in a variety of studies that aimed to understand the determinants and economic implications of such tax minimising behaviours. Table 1 offers a summary of relevant recent international studies on corporate tax avoidance. The Table is useful in providing an overview of the methodology employed over the years in this line of study and is fundamental for our own choice of the research design. Corporate tax avoidance was subject of integrative literature reviews, such as the one carried out by Whait et al. (2018) on the basis of 143 academic articles. Another recent methodological approach was a between-subjects experiment performed by Antonetti and Anesa (2017) to investigate how stakeholders react to corporate tax strategies that are either aggressive or conservative. Only a few authors chose an event-study methodology to examine the stock price reaction to news referring to corporate tax avoidance (Blaufus et al., 2019; Hanlon & Slemrod, 2009).

Most authors performed a regression analysis where corporate tax avoidance was the analysed as (dependent) variable (Armstrong et al., 2012; Chen et al., 2010; Chyz et al., 2013; Lanis & Richardson, 2012; Mafrolla & D'Amico, 2016; Richardson et al., 2013; 2015b; Steijvers & Niskanen, 2014). In other studies, the corporate tax avoidance is treated within the regression model as an independent (explanatory) variable. For instance, Richardson et al. (2014) examine the influence of tax avoidance on corporate debt policy, while Kubick and Lockhart (2017) investigate the association between tax avoidance and corporate debt maturity. We have chosen to embark on a multivariate regression analysis where corporate tax avoidance is the dependent (explained) variable, thus following the majority of other authors in the field.

Regarding the analysed geographical region, we have chosen to focus on one country only – Romania – as did many researchers before us. Few studies are cross-country analyses which comprise several European countries (such as Buijink et al., 1999; Jaafar & Thornton, 2015). Most studies available in international journals use data on companies established in the United States (such as Armstrong et al., 2012; Chen et al., 2010; Chyz et al., 2013; Gallemore & Labro, 2015; Gupta & Newberry, 1997; Higgins et al., 2015; Jennings et al., 2012 etc.). Some other one-country studies are focusing on Australia and New Zealand (Harris & Feeny, 2003; Lanis & Richardson, 2012; Richardson & Lanis, 2007; Taylor & Richardson, 2012; Wilkinson et al., 2001). Fernández-Rodríguez and Martínez-Arias (2012) consider China and USA in their study, while Fernández-Rodríguez and Martínez-Arias (2014) consider the BRIC

Table 1. Previous research on tax avoidance.

	Author	Year	Sample	Methodology	Objective
1	Hanlon & Slemrod	2009	108 articles, pertaining to 97 companies from a search of Factiva 1/1/1990–9/1/2004	event-study methodology	To examine the stock price reaction to news referring to corporate tax aggressiveness
2	Chen et al.	2010	3865 firm-year observations from Standard & Poor's 1500 companies in the timeframe 1996–2000	cross-sectional regression with a tax aggressiveness measure as a dependent variable	To study the impact of founding family ownership over tax aggressiveness.
3	Lanis & Richardson	2011	16 Australian corporations accused of undertaking tax aggressive activities, matched with 16 non-tax-aggressive corporations	logit regression analysis with corporate tax aggressiveness as dependent variable	To consider the effect of board of directors composition on tax aggressiveness
4	Armstrong et al.	2012	1162 firm-year observations of 423 unique US companies for the years 2002 through 2006	regression analysis with corporate tax aggressiveness as dependent variable	To investigate whether the incentives given to tax directors are connected with reduced tax aggressiveness
5	Lanis & Richardson	2012	408 publicly listed Australian companies for the fiscal year 2008/2009	regression model with corporate tax aggressiveness as dependent variable	To examine the association between corporate social responsibility and tax aggressiveness
6	Richardson et al.	2013	812 firm-year observations of 203 publicly listed Australian companies within the period 2006–2009	logit regression analysis with corporate tax aggressiveness as dependent variable	To scrutinise the influence of board of director oversight characteristics on tax aggressiveness
7	Chyz	2013	7821firm-year observations consisting in 'exercise-and-hold' transactions between 01.01. 1996 and 29.08. 2002 reported on SEC Form 4	multivariate regression analysis with a treatment variable	To investigate whether executives who evidence a predisposition for personal tax evasion are associated with tax sheltering at company level
8	Chyz et al.	2013	749 firm-year observations from the FMCS (Federal Mediation and Conciliation Service) and the Center for Research in Security Prices (CRSP) databases	regression model with corporate tax aggressiveness as dependent variable	To investigate a link between labour unions and tax aggressiveness of companies.
9	Alm	2014	N/A – theoretical analysis	modelling of individual and group motivations and incorporating insights from behavioural economics	To examine the impact of an uncertain tax system on the use of aggressive tax planning
10	Lin et al.	2014	1500 US publicly traded companies for the period 2006–2011	regression model with a firm's leverage as a dependent variable and a tax aggressiveness measure as explanatory variable	To test whether various measures of corporate leverage are related to tax aggressiveness
11	Richardson et al.	2014	6967 firm-year observations over the 2001–2010 period, collected from the Corporate Library, Compustat, Investor	multivariate regression model with tax aggressiveness as independent variable	To examine the influence of tax aggressiveness on corporate debt policy (the debt-substitution effect)

(*continued*)

Table 1. Continued.

	Author	Year	Sample	Methodology	Objective
			Responsibility Research Center, and Audit Analytics		
12	Steijvers & Niskanen	2014	data collected through a private survey with answers from 600 small and medium enterprises operating in Finland	regression model with corporate tax aggressiveness as dependent variable	To investigate, from an agency perspective, whether private family companies, compared to private nonfamily companies, are more tax aggressive
13	Armstrong et al.	2015	companies listed on Compustat for the 2007–2011 fiscal years	quantile regression estimates	To examine the link between various corporate governance mechanisms such as board's independence and expertise and the level of corporate tax avoidance
14	Laguir et al.	2015	83 firm-year observations from 24 listed companies drawn from the Vigeo database for French companies for the 2003-2011 period	partial least squares (PLS) method for structural equation model estimation (SEM)	To investigate how the different activities of corporate social responsibility affect corporate tax aggressiveness.
15	Richardson et al.	2015a	203 publicly listed Australian companies covering the 2006–2010 period	regression model with corporate tax avoidance as dependent variable	To examine the impact of financial distress (such as the Global Financial Crisis) on tax avoidance
16	Richardson et al.	2015b	753 US companies over the 2006–2010 period (3765 firm-years)	regression model with corporate tax aggressiveness as dependent variable	To examine the impact of the interaction between board independence and company-specific financial distress on corporate tax aggressiveness
17	Allen et al.	2016	29 unique brokerage house mergers between 1988 and 2008 in USA	difference-in-differences analysis and cross-sectional regression analyses	To determine whether financial analysts limit or boost corporate tax aggressiveness
18	Mafrolla & D'Amico	2016	183 companies listed on the Milan Stock Exchange for the period 2006–2011 (1,098 firm-year observations)	regression model with corporate tax aggressiveness as dependent variable	To test whether family companies are more tax aggressive than non-family companies in case family involvement is greater
19	Antonetti & Anesa	2017	402 US residents recruited online through Amazon Mechanical Turk (AMT)	between-subjects experiment	To investigate how stakeholders react to corporate tax strategies that are either aggressive or conservative.
20	Gebhart	2017	Publicly traded companies from the Compustat Database for the years 1996 to 2015	correlation analysis	To answer the question of how closely related are different existing measures of tax avoidance
21	Kubick & Lockhart	2017	10,967 firm-year observations with debt in the capital structure extracted from Execucomp database for 1993–2012.	multivariate regression model with tax aggressiveness as independent variable	To investigate the association between tax aggressiveness and corporate debt maturity
22	McClure et al.	2018		regression model	To evaluate differences in the level of tax avoidance between companies paying

(*continued*)

Table 1. Continued.

	Author	Year	Sample	Methodology	Objective
			4729 firm-years extracted from the Australian Stock Exchange (ASX) during financial-years 2004 to 2015		dividends with tax credits, those paying dividends without tax credits, and those not paying dividends
23	Whait et al.	2018	143 articles selected from online databases such as Science Direct, Scopus, EBSCO Host, Emerald Insight, JSTOR etc.	integrative literature review	To understand the relationship between tax aggressiveness and CSR in the academic literature
24	Thomsen & Watrin	2018	25,717 EU and 34,209 U.S. firm-year observations available in the Compustat database for the period 2005 – 2016	panel regression model	To investigate whether differences can be observed over time between the tax avoidance behaviours of U.S. and European firms
25	Blaufus et al.	2019	176 tax news items about corporate tax strategies that are legal (tax avoidance) and illegal (tax evasion regarding listed German companies in the period 2003 – 2016	an event study with a three trading-day event window centred on the event date	To study stock price reactions as a response to newspaper articles that report tax avoidance or evasion efforts of publically listed companies
26	Fallan & Fallan	2019	around 100 publicly listed corporations on the Oslo Stock Exchange (OSE)	regression model with corporate tax aggressiveness as dependent variable	To explore the relationship between corporate tax-aggressive behaviour and the degree of environmental disclosure

Source: Authors' design.

countries (Brazil, China, India and Russian Federation). Herbert and Overesch (2014) and Kraft (2014) use German empirical data to reveal what affects German companies' effective rates.

Ţâiu et al. (2011), Lazăr (2011), Vintilă et al. (2011), Teodorescu and Istudor (2017) analysed the relationship between effective tax rate and statutory tax rate in Romanian companies in different periods of time. Vintilă et al. (2012) wrote about tax aggressive behaviour and used the effective tax rate to measure it. In exploring tax avoidance in Romania, Romanian authors used exclusively information from the annual financial statements published by companies listed on the stock exchange. Onofrei et al. (2016) researched the determinants of the effective tax rate in S&P 500 companies. Vintilă et al. (2016) researched the connection between governance characteristics and the effective tax rate in US companies. Vintilă and Păunescu (2016) focused on the determinants of the effective tax rate in technology sector companies listed on NASDAQ. Păunescu and Vintilă (2018) wrote about the determinants of the effective tax rate in the Baltic companies. Vintilă et al. (2017), Vintilă et al. (2018) and Onofrei et al. (2018) wrote about the determinants of the effective tax rate in the Eastern European companies – including Romania. Our research aims at filling in this gap in the literature and at exploring in depth the determinants of tax avoidance in Romanian companies, irrespective whether listed or not.

3. Research design

3.1. Data collection

We identified all entities that were found guilty of tax evasion crimes carried out over the period 2013–2017 (in accordance with Law 241/2005 on the prevention and fighting of tax evasion). The names of these entities were published by the Ministry of Justice in Romania and the National Anticorruption Directorate on their websites (http://portal.just.ro and https://www.pna.ro). Then, we eliminated from our sample the following types of entities: national companies (e.g., companies where the state is the sole shareholder); autonomous administrations; national research and development institutes; associations; non-banking financial institutions; as well as insurance companies and banks.

Consequently, our final sample comprises 236 privately owned limited liability and stock companies that are payers of profit tax and submitted their annual financial statements in at least one of the five years from within the analysed period 2013–2017. For each of these 236 companies, we collected the financial data published by the Romanian Ministry of Public Finance over the period 2013–2017. Additional to data of financial nature, we also obtained the following pieces of information about the sampled companies: the average number of employees, the county where the company is registered in and the main type of activity each company performs as per the categories from the Statistical classification of economic activities in the European Community (NACE). The resulting panel is unbalanced. Tables 2–4 show the structure of our sample in agreement with three criteria: fiscal year, industry and region.

Table 2. Year distribution of evading companies.

Year	Number of companies	Per cent
2013	190	30.45
2014	146	23.40
2015	114	18.27
2016	99	15.87
2017	75	12.01
Total	**624**	**100.00**

Source: Authors' design.

Table 3. Region distribution of evading companies.

Region	Number of company-years	Per cent
Bucharest	132	21.15
Other regions	492	78.85
Total	**624**	**100**

Source: Authors' design.

Table 4. Industry distribution of selected companies.

Industry	Number of company-years	Per cent
A Agriculture, forestry and fishing	58	9.29
C Manufacturing	82	13.14
F Construction	156	25.00
G Wholesale and retail trade, repair of motor vehicles and motorcycles	207	33.17
Others	121	19.39
Total	**624**	**100.00**

Source: Authors' design.

With every passing year, fewer and fewer evading companies submitted their annual financial statements to the fiscal authorities. Thus, the sub-sample of the financial year 2013 includes most observations (namely 190, representing approximately 30% of the total year-observations), while the sub-sample of 2017 includes only 75 observations, meaning that only 75 evading companies submitted their financial statements during that year.

Regarding the region where the selected evading companies are registered in, the analysis of the sample structure reveals that 51 evading companies out of 236 are registered in Bucharest-Ilfov. All others operate in one of the following regions: North-West; South-Muntenia; Center; West; South-East; North-East; and South-West Oltenia.

Concerning the industry sector in which the evading companies operate in, more than a third (90 companies, representing 38% of the sample) belong to the NACE category 'Wholesale and retail trade; repair of motor vehicles and motorcycles'. 44 out of 236 companies fall into the category 'Other' and their industry belongs to one of the following sections: E 'Water supply; sewerage, waste management & remediation activities'; H 'Transportation & storage'; I 'Accommodation & food service activities'; J 'Information & communication'; L 'Real estate activities'; M 'Professional, scientific & technical activities'; N 'Administrative & support service activities'; and S 'Other service activities'.

Additionally, we created a match for the group of evading companies, respectively a sample of 236 companies that were never prosecuted for tax evasion crimes and existed between 2013 and 2017. We called this control sample – compliant

companies. The sample of compliant companies was selected randomly, making sure that it perfectly matches the group of evading companies in accordance with the industry criterion. The data collection framework was the database containing the 2017 financial data submitted by companies across Romania and made publicly available by the Ministry of Public Finance on one of its official websites. To begin with, we eliminated those companies that we knew were accused of tax evasion crimes. Next, we selected solely companies that were payers of profit tax. Only afterwards, we applied random sampling to the remaining list of entities, with the assistance of Stata, so that the sample of compliant companies is the exact mirror of the initial sample of evading companies from the point of view of their industry.

3.2. Hypotheses development

First of all, we hypothesise that Romanian companies (irrespective of whether evading or not) exhibit a more prominent tax-avoidant behaviour in the years following the legislative changes in Romania in 2016. Before the fiscal year 2016, only the expenses incurred in order to obtain taxable income were deductible expenses when computing the taxable profit. After 2016, only the expenses incurred for the purpose of carrying out the economic activity are deductible expenses when computing the fiscal result. Another legislative change refers to the need for supporting documents when booking expenses. Before the fiscal year 2016, the expenses booked without supporting documents available had to be considered non-deductible in Romania when calculating the taxable profit, as per the Tax Code, article 21, paragraph 4, letter f), in the variant that came into force on January 1, 2004 and valid for the period 2013–2015. However, starting with the enforcement of the Law no. 227/2015 on the Tax Code on January 1, 2016 (thus valid for the years 2016–2017), this provision no longer exists.

Another legislative change relevant to our study is the amendment of the Tax Procedure Code by introducing the principle 'in dubio contra fiscum', applicable starting with January 2016. This principle states that in case of uncertainties in the tax provisions, the law shall be interpreted in favour of the taxpayers, thus protecting them against an abusive application of the law by the tax authorities (Blanch, 2016). Therefore, companies could interpret the 2016 amendments to the Tax Code in their favour in the sense that they could match more expenses with their economic activity, thus classify them as deductible and ultimately lowering their profit tax liability. Following all these legislative amendments, the range of deductible expenses is much wider for payers of profit tax, which in our view encourages them to engage in tax avoidance.

Second, prior research finds that long-run tax avoidance is positively associated with company size (Dyreng et al., 2008; Richardson et al., 2015b; Richardson & Lanis, 2007). This could be explained by the fact that larger-sized companies have greater power in comparison to smaller-sized companies. Larger companies are able to influence the political process in their favour to a greater extent than small companies (Stickney & McGee, 1982). In particular, large companies can use their resources and power to negotiate their tax burden or influence legislation in their favour (for instance, through lobbying activities) (Gupta & Newberry, 1997; Siegfried, 1972;

Stickney & McGee, 1982). Consequently, we investigate whether company size is associated with tax avoidance. Size is calculated as the natural logarithm of total assets (variable SIZE).

Third, companies with higher financial performance generally have a higher taxable profit and therefore a higher tax on profit. For these reasons, we expect them to be more incentivised to minimise their tax liabilities, in other words to be more inclined towards tax avoidance. Eichfelder and Hechtner (2018) argue that profitable companies have more resources which allow them to employ good fiscal consultants who assist them in reducing their due tax. We thus posit a positive association between a company's financial performance and its tax-avoidant behaviour. We use the Return on Assets as indicator of a company's profitability (variable PERF).

Fourth, Mills and Newberry (2005) and Drucker (2006) explain the existence of a negative association between a company's leverage and its tax-avoidant behaviour. They suggest that some companies wish to create off-balance-sheet financing via tax avoidance, thereby removing debt from the financial statements and lowering leverage. Such companies use tax avoidance actions to prevent great sums of money raised from being booked as debt on the company's financial statements. For this reason, we include in modelling tax avoidance a company's leverage ratio measured as debt divided by total assets (variable LEV). We expect the leverage ratio is negatively associated with tax avoidance, as prior studies suggest (Allen et al., 2016; Chyz et al., 2013; Drucker, 2006; Majeed & Yan, 2019; Mills & Newberry, 2005).

Finally, we also include in our analysis various control variables. We investigate the entire sample of both evading and compliant companies; therefore we define a dummy variable (EVZ) that takes the value 0 if the disclosing company was compliant in the analysed timeframe and the value 1 if it was prosecuted and found guilty for tax evasion. Our assumption is that tax evaders are more tax avoidant than 'clean' companies which were never prosecuted for tax evasion crimes. Next, we include in the analysis the region where the selected companies operate in. We define a binary variable that takes the value 1 if the company is based in Bucharest and 0 otherwise (variable REGION). We draw on the fact that studies (e.g., Zeng, 2011) have shown that companies pay higher/lower tax when they are located in a region with more/less developed market and legal institutions. We do not predict any sign for the region dummy. Second, we are aware of the fact that each product market of service market has its own specificities (Bușu, 2014; Jindřichovská et al., 2020). Thus, we include a dummy variable for the industry sector that takes the following values: 'A' for Agriculture, forestry and fishing; 'C' for Manufacturing; 'F' for Construction; 'G' for Wholesale and retail trade, repair of motor vehicles and motorcycles (variable INDUSTRY). These categories are compared to the category 'Other' which cumulates all other sectors not mentioned above. The reason for including this control variable is the possibility for tax avoidance to vary across different industry sectors (Rego, 2003; Richardson et al., 2015a). No sign predictions are made for the industry dummies either.

To test the above hypotheses, we employ linear regression with cluster-robust standard errors. The general model is as described below.

Table 5. Means and standard deviations of the continuous variables.

	Full sample					Compliant companies			Evading companies		
Variable	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Obs	Mean	Std. Dev.
Scaled_BTD	1674	−0.3521	0.9352	−14.6797	2.1068	1050	−0.5663	1.1241	624	0.0084	0.1156
ln_Assets	1674	14.6550	1.9498	6.4218	19.9633	1050	14.9839	1.9679	624	14.1016	1.7887
ROA	1674	0.1109	0.1544	0.0000	2.1391	1050	0.1215	0.1444	624	0.0930	0.1685
D_A_Ratio	1674	0.5959	0.2545	0.0144	0.9999	1050	0.5591	0.2502	624	0.6577	0.2496

Source: Authors' design.

$$\text{Scaled}_{\text{BTD}}\text{it} = \alpha_0 + \beta_1 SIZE_{it} + \beta_2 PERF_{it} + \beta_3 LEV_{it} + \beta_4 Year_D it + \beta_5 EVZ_{it} + \beta_6 REGION_{it} + \beta_{7-10} INDUSTRY_{it} + \varepsilon$$

The dependent variable Scaled_BTD_{it} is a proxy for tax avoidance. We employ the book-tax differences scaled by total assets. This is calculated as the company's i book-tax differences, which equal book profit less taxable profit, scaled by total assets. Book (or accounting) profit is pre-tax (or gross) profit in year t which we extracted from the set of financial data published by the Romanian Ministry of Public Finance for each reporting company. Taxable profit is not among the publicly available financial data, and this is the reason why we calculate it indirectly by dividing the profit tax payable in year t by the statutory flat tax rate of 16%. Last, we scale this difference by total assets and it results Scaled_BTD_{it} (Badertscher et al., 2016; Mills & Newberry, 2001). We assume that large book-tax differences could be a useful indicator of the company's attempts to minimise their tax-related costs.

4. Results

4.1. Descriptive statistics

Table 5 displays the descriptive statistics for the total sample, as well as for the two sub-samples of evading and compliant companies. When comparing the two groups, the descriptive statistics suggests that, on average, evading companies have a lower financial performance with data points more spread out (mean ROA 0.0930 and standard deviation 0.1685) than compliant companies (mean ROA 0.1215 and standard deviation 0.1444). However, the leverage measured by Debt-to-Assets Ratio is higher in the group of evading companies compared to the group of conforming companies (mean D_A_Ratio 0.6577, respectively 0.5959) while both groups have a similarly high standard deviation. With respect to size measured as natural logarithm of total assets, the two groups do not differ widely and, on average, are comparable in size. The dependent variable (the scaled book-tax difference) is negative on average in the full sample analysed over the five years, but positive and tending towards 0 in case of evading companies.

Table 6 reports the Pearson and Spearman pairwise correlation coefficients between the variables. The size indicators (number of employees and net sales) are negatively correlated with the book-tax differences. Likewise, there is a negative correlation between the indicators of profitability (Return on Assets – ROA; Return on Equity – ROE) and scaled BTD. Moreover, the correlation matrix suggests

Table 6. Correlation matrix (Spearman and Pearson coefficients).

	Scaled_ BTD	ln_ Assets	ln_No_ Empl	ln_Net_ Sales	ROA	ROE	D_A_ Ratio	Region	Year_D	EVZ
Scaled_BTD	1.000	−0.047	−.187**	−.192**	−.457**	−.257**	.293**	−.117**	−.073**	.297**
ln_Assets	−0.047	1.000	.771**	.861**	−.120**	−.211**	−.094**	.230**	.135**	−.219**
ln_No_Empl	−.187**	.771**	1.000	.754**	0.010	−.164**	−.208**	.126**	.115**	−.294**
ln_Net_Sales	−.192**	.861**	.754**	1.000	.056*	−0.047	−.098**	.233**	.129**	−.308**
ROA	−.457**	−.120**	0.010	.056*	1.000	.743**	−.408**	.137**	.077**	−.089**
ROE	−.257**	−.211**	−.164**	−0.047	.743**	1.000	.167**	0.039	0.032	−0.018
D_A_Ratio	.293**	−−.094**	−.208**	−.098**	−.408**	.167**	1.000	−.086**	−.084**	.187**
Region	−.117**	.230**	.126**	.233**	.137**	0.039	−.086**	1.000	0.025	−.121**
Year_D	−.073**	.135**	.115**	.129**	.077**	0.032	−.084**	0.025	1.000	−.143**
EVZ	.297**	−.219**	−.294**	−.308**	−.089**	−0.018	.187**	−.121**	-.143**	1.000

Source: Authors' design.
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

correlations between the geographical region, the legislative milestone and the type of company on one hand and the book-tax differences on the other hand. Most importantly, no significant correlations exist between the independent variables employed later on in various models, which demonstrates that multicollinearity is not an issue for our regression analysis.

4.2. Main findings

Table 7 shows the results of examining the scaled book-tax differences for the sampled privately owned companies based in Romania and paying profit tax. We performed a linear regression analysis with cluster-robust standard errors. The sign '*' reads significant at 10%, '**' – significant at 5% and '***' – significant at 1%. The table includes the coefficients, the t-scores (in parenthesis), as well as root mean squared error (MSE) and the value of R^2 for each of the alternative linear regression models tested.

Model A is the main model applied to the full sample of 1674 company-years. With regards to the link between size and book-tax differences, model A reveals a positive and significant association between total assets and scaled BTD, suggesting that the larger the company, the larger the scaled BTD, namely the more inclined towards tax avoidance that disclosing company is. The link between financial performance and scaled BTD consists in a significant but negative association. In other words, the more profitable a company is (namely the higher its ROA), the less inclined towards tax avoidance that company is (the lower its scaled BTD).

The leverage ratio seems to have a significant and positive impact upon the book-tax differences, thus showing that, as expected, it is negatively associated with tax avoidance. As hypothesised, it matters in which industry the company operates in. Significant is also the association between the dependent variable and the geographical region: companies located outside Bucharest have lower BTDs, suggesting that entities based around Romania's capital city have a more prominent tendency towards tax avoidance. Our hypothesis that Romanian companies are more tax-avoidant in the years following the legislative changes in Romania in 2016 does not hold.

What the full-sample model shows is that evading companies display larger book-tax differences compared to companies that were not prosecuted nor found guilty of

Table 7. Results of the linear models.

Scaled_BTD	Model (A)	Model (B)	Model (C)	Model (D)		Model (E)		Model (F)	
ln_Assets	0.0552863***	0.0585095***	0.0693043***	ln_No_Empl	0.0351124**	ln_Net_Sales	0.0495507**	ln_Assets	0.0876105***
	(2.76)	(2.81)	(2.83)		(2.08)		(2.42)		(5.27)
ROA	−1.396261***	−1.357959***	−1.325675***	ROA	−1.518874***	ROA	−1.522907***	ROE	−0.0004717***
	(−3.45)	(−3.29)	(−2.74)		(−3.85)		(−3.92)		(−19.44)
D_A_Ratio	0.5307275***	0.5643645***	0.6004168***	D_A_Ratio	0.5368197***	D_A_Ratio	0.5046925***	D_A_Ratio	0.8660557***
	(3.49)	(3.54)	(3.35)		(3.41)		(3.48)		(6.90)
Industry				Industry		Industry		Industry	
C	0.5312496**	0.5493829**	0.5941565**	C	0.4710382**	C	0.50901**	C	0.5326536**
	(2.34)	(2.34)	(2.17)		(2.26)		(2.31)		(2.38)
F	0.4737411**	0.4892199**	0.5015405*	F	0.4261983**	F	0.4660491**	F	0.4776022**
	(2.17)	(2.16)	(1.91)		(2.09)		(2.14)		(2.22)
G	0.4539162**	0.4748678**	0.4977048*	G	0.387286*	G	0.3970723*	G	0.4467372**
	(1.98)	(2.00)	(1.81)		(1.82)		(1.85)		(1.97)
Others	0.444627**	0.4618354**	0.4940961*	Others	0.3769256*	Others	0.4205639*	Others	0.4223086*
	(1.99)	(2.00)	(1.83)		(1.85)		(1.93)		(1.90)
Region	−0.1827311***	−0.1826638***	−0.185827***	Region	−0.1330075***	Region	−0.1653378***	Region	−0.2531479***
	(−4.86)	(−4.74)	(−4.06)		(−4.43)		(−4.99)		(−6.97)
Year_D	−0.0339947	−0.0346844	−0.0487436	Year_D	−0.0187673	Year_D	−0.0263736	Year_D	−0.0636938*
	(−0.74)	(−0.72)	(−0.85)		(−0.41)		(−0.59)		(−1.39)
EVZ	0.5119347***	0.5184696***	0.5248105***	EVZ	0.5062559***	EVZ	0.5251962***	EVZ	0.5331082***
	(12.02)	(11.57)	(10.56)		(11.81)		(10.72)		(14.02)
Intercept	−1.879239***	−1.972678***	−2.182693***	Intercept	−1.144963***	Intercept	−1.767991***	Intercept	−2.677694***
	(−3.09)	(−3.12)	(−2.98)		(−3.11)		(−2.87)		(-5.12)
Obs	1674	1590	1256	Obs	1674	Obs	1674	Obs	1674
Root MSE	0.82308	0.84144	0.85874	Root MSE	0.82619	Root MSE	0.82342	Root MSE	0.84268
R-squared	23.01%	22.86%	23.38%	R-squared	22.42%	R-squared	22.94%	R-squared	19.30%

tax evasion crimes. In other words, our hypothesis concerning the increased tax avoidance of evading companies compared to compliant ones was supported by the regression results.

4.3. Robustness checks

We performed several robustness checks to the main specification in the regression Model A. First, we extracted two random samples of 95% (1590 observations) and respectively 75% of the initial sample (1256 observations) and re-ran the regression (see Models B and C in Table 7). The results of these regressions are the same as those in the initial regression analysis (Model A). The values of R-Squared indicate that the variation in the variable 'scaled book-tax difference' can be attributed to the variation of the explanatory variables (total assets, ROA, and leverage) in a percentage that remains around 23% across these models (B and C) having controlled for region, industry, company type and legislative changes. Another robustness check was to modify the model specifications by replacing the size indicator (the natural logarithm of total assets) by the natural logarithm of the number of employees (see Model D in Table 7) and by the natural logarithm of net sales (see Model E in Table 7). Last, we have replaced the indicator of financial performance (Return on Assets – ROA) by another similar indicator of profitability – the Return on Equity (ROE) – see Model F in Table 7. All alternative regression models (B through F) were found valid and their parameters were significant (with a p-value below 0.01). The R-Squared indicates that on average approximately 22% of the variation in the scaled book-tax differences is explained by the dependent variables (size, financial performance and leverage), having controlled for geographical region, industry, company type (evading or compliant) and the legislative turnaround in 2016.

5. Discussions and conclusions

Our research offers a relevant and up-to-date picture of Romanian companies that were payers of profit tax in recent years. Our sample contains 236 evading and 236 compliant companies, adding up to 1674 year-observations from the period 2013–2017. We chose to compare the set of 236 evading companies with another set of 236 compliant ones selected randomly so that the structure by industry of the two groups remains the same. For the purposes of our research, we defined compliant companies as companies that have never been prosecuted for tax evasion crimes (according to the Law 241/2005 on the prevention and fighting of tax evasion) and existed between 2013 and 2017.

We analysed the data contained in the financial statements submitted by the selected companies to the Romanian Ministry of Public Finance. Our results show that the disclosure discipline of evading companies fades with every year that passes. On the contrary, compliant companies submit their financial statements regularly within the five-year period. In the fiscal year 2013, 190 evading companies made their financial statements public, and their number drops to only 75 evading companies in

2017. Only about one fifth of our sample of evading companies has been consistent in submitting their financial statements in each of the five years analysed. The reason is that such companies have a lower motivation in providing financial data to the Romanian state and to their other stakeholders.

Our main findings are in agreement with the political power theory (Belz et al., 2019; Gupta & Newberry, 1997; Siegfried, 1972; Stickney & McGee, 1982). This theory has been first described by Siegfried (1972), who argues that larger companies are able to influence the political process in their favor to a greater extent than small companies (Stickney & McGee, 1982). In particular, large companies can use their resources and power to negotiate their tax burden or influence legislation in their favour (for instance, through lobbying activities), resulting in lower taxes payable compared to those of smaller companies (Gupta & Newberry, 1997; Siegfried, 1972; Stickney & McGee, 1982). Indeed, the results of the regression analyses reveal a positive and significant association between book-tax differences scaled by total assets and several indicators of size (total assets, number of employees, net sales). The larger the company, the more inclined towards tax avoidance it is.

We also find a significantly negative association between financial performance and book-tax differences scaled by total assets, which actually suggests the positive impact of performance upon the tax-avoidant behaviour. The higher the profitability of a company, the less inclined towards tax avoidance that company is. Our results are in line with prior studies such as Higgins et al. (2015), Allen et al. (2016) and Majeed and Yan (2019). We also note a negative relationship of leverage with tax avoidance which was highlighted by previous research (Allen et al., 2016; Chyz et al., 2013; Drucker, 2006; Majeed & Yan, 2019; Mills & Newberry, 2005). Surprisingly, the fiscal regulations amended starting with 2016 did not lead to an apparent exacerbation of tax avoidance among Romanian profit tax payers. These amendments increased the range of deductible expenses that could diminish the profit tax and, in our opinion, could have encouraged tax avoidance. Consequently, we can only conclude that, irrespective of the legal environment, companies in Romania are consistent in their attempts to minimise their profit tax liabilities.

Our investigation was subject to several limitations. First, our sample comprises only privately owned companies which are payers of profit tax and does not include entities from the public sector or payers of tax on the income of micro-entities, as defined by the Romanian legislation. Second, we only use publicly available data, put at the disposal by the Ministry of Public Finance. The publicly available financial data offers the following level of detail: assets are split into non-current assets, current assets, and prepaid expenses, while just the sub-category 'current assets' is further detailed into inventory, receivables, and cash. Total debt plus equity comprises liabilities, provisions, equity (and separately owner's equity), as well as prepaid income. Net sales, revenues, expenses, gross profit/loss, and net profit/loss are the figures made available from the profit and loss statement. This limited data also limited our choice of the dependent variable as a proxy of tax avoidance. Despite this, a major plus of our study is the fact that it does not focus exclusively on listed companies, as the majority of studies in the field, but offers a wider view on privately owned companies of all sizes.

Our study is relevant not only for legislators and tax authorities, but also for companies operating in Romania and for potential and actual investors interested in the status-quo of the business environment over the past few years in Romania. Moreover, the results of the present study could be relevant for other countries from South-Eastern Europe and similar studies applied to this geographical area may very well lead to comparable conclusions. In our view, the future in this field of research lies in the combination of both economic and noneconomic factors in order to gain a deeper understanding of tax avoidance in the corporate world.

Disclosure statement

No potential conflict of interest was reported by the authors.

Law no. 571/2003 on the Tax Code

Law no. 227/2015 on the Tax Code

Law 241/2005 on the prevention and fighting of tax evasion

Law 207/2015 on the Tax Procedure Code

Government Ordinance 92/2003 on the Tax Procedure Code

Order 3055/2009 for the approval of the Accounting Regulations in accordance with the European directives

Order no. 1802/2014 for the approval of the Accounting Regulations regarding the individual annual financial statements and the consolidated annual financial statements

Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains

References

Allen, A., Francis, B. B., Wu, Q., & Zhao, Y. (2016). Analyst coverage and corporate tax avoidance. *Journal of Banking & Finance*, *73*, 84–98.

Alm, J., Bahl, R., & Murray, M. N. (1993). Audit selection and income tax under-reporting in the tax compliance game. *Journal of Development Economics*, *42*(1), 1–33. https://doi.org/10.1016/0304-3878(93)90070-4

Antonetti, P., & Anesa, M. (2017). Consumer reactions to corporate tax strategies. The role of political ideology. *Journal of Business Research*, *74*, 1–10. https://doi.org/10.1016/j.jbusres.2016.12.011

Armstrong, C., Blouin, J., & Larcker, D. (2012). The incentives for tax planning. *Journal of Accounting and Economics*, *53*(1-2), 391–411. https://doi.org/10.1016/j.jacceco.2011.04.001

Armstrong, C., Blouin, J., Jagolinzer, A., & Larcker, D. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, *60*(1), 1–17. https://doi.org/10.1016/j.jacceco.2015.02.003

Badertscher, B. A., Katz, S. P., & Rego, S. O. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, *56*(2/3), 228–250.

Belz, T., von Hagen, D., & Steffens, C. (2019). Taxes and firm size: Political cost or political power? *Journal of Accounting Literature*, *42*(C), 1–28. https://doi.org/10.1016/j.acclit.2018.12.001

Blanch, J. M. (2016). Observaciones en torno a la formacion historica de la regla 'in dubio contra fiscum (pro fisco)' y a la recta interpretación de mod. l. sing. de praescript. d. 49.14.10. *General de Derecho Roma*, *26*(7), 1–32.

Blaufus, K., Möhlmann, A., & Schwäbe, A. (2019). Stock price reactions to news about corporate tax avoidance and evasion. *Journal of Economic Psychology*, *72*, 278–292. https://doi.org/10.1016/j.joep.2019.04.007

Buijink, W., Janssen, B., & Schols, Y. (1999). Corporate effective tax rates in the European Union – Final report. Commissioned by the Ministry of Finance in the Netherlands. Working Paper.

Bușu, M. (2014). How concentrated is the Romanian mobile market? *SEA – Practical Application of Science*, *2*(4), 473–482.

Chen, K. P., & Chu, C. (2005). Internal control vs. external manipulation: A model of corporate income tax evasion. *RAND Journal of Economics*, *36*(4), 151–164.

Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, *95*(1), 41–61. https://doi.org/10.1016/j.jfineco.2009.02.003

Chennells, L., & Griffith, R. (1997). *Taxing profits in a changing world*. Institute for Fiscal Studies.

Chyz, J. (2013). Personally tax aggressive executives and corporate tax sheltering. *Journal of Accounting and Economics*, *56*(2-3), 311–328. https://doi.org/10.1016/j.jacceco.2013.09.003

Chyz, J., Leung, W. S. C., Li, O. Z., & Rui, O. M. (2013). Labor unions and tax aggressiveness. *Journal of Financial Economics*, *108*(3), 675–698. https://doi.org/10.1016/j.jfineco.2013.01.012

Collins, J., & Shackelford, D. (1995). Corporate domicile and average effective tax rates: The cases of Canada, Japan, the United Kingdom and the United States. *International Tax and Public Finance*, *2*(1), 55–83. https://doi.org/10.1007/BF00873107

Comândaru, A. M., Stănescu, S. G., & Păduraru A. (2018). The phenomenon of tax evasion and the need to combat tax evasion. *Contemporary Economy Journal*, *3*(3), 124–133.

Constantin, S. B. (2014). A study on tax evasion in Romania. *ECOTREND Conference Proceedings*, Academica Brâncuși House Publisher.

Constantin, S. B. (2016). Tax havens in the offshore world. *'Ovidius University Annals. Economic Sciences Series*, *16*(1), 487–492.

Constantin, S. B. (2018). Ghost companies, fiction or reality? *Ovidius' University Annals, Economic Sciences Series*, *18*(2), 583–587.

David, D., & Pojar, D. (2011). Approaches regarding the tax evasion in Romania. *Annals of Faculty of Economics, University of Oradea, Faculty of Economics*, *1*(1), 376–381.

Desai, M. A., Dyck, A., & Zingales, L. (2007). Theft and taxes. *Journal of Financial Economics*, *84*(3), 591–623. https://doi.org/10.1016/j.jfineco.2006.05.005

Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, *79*(1), 145–179. https://doi.org/10.1016/j.jfineco.2005.02.002

Desai, M. A., & Dharmapala, D. (2009a). Earnings management, corporate tax shelters, and book-tax alignment. *National Tax Journal*, *62*(1), 169–186. https://doi.org/10.17310/ntj.2009.1.08

Desai, M. A., & Dharmapala, D. (2009b). Corporate tax avoidance and firm value. *Review of Economics and Statistics*, *91*(3), 537–546. https://doi.org/10.1162/rest.91.3.537

Drucker, J. (2010). Google 2.4% rate shows how $60 billion is lost to tax loopholes. Retrieved 05 January, 2019 from https://www.bloomberg.com/news/2010-10-21/google-2-4-rate-shows-how-60-billion-u-s-revenue-lost-to-tax-loopholes.html.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long-run corporate tax avoidance. *The Accounting Review*, *83*(1), 61–82. https://doi.org/10.2308/accr.2008.83.1.61

Eichfelder, S., & Hechtner, F. (2018). Tax compliance costs: Cost burden and cost reliability. *Public Finance Review*, *46*(5), 764–792. https://doi.org/10.1177/1091142117691603

Fallan, E., & Fallan, L. (2019). Corporate tax behaviour and environmental disclosure: Strategic trade-offs across elements of CSR? *Scandinavian Journal of Management*, *35*(3), 101042–101015. https://doi.org/10.1016/j.scaman.2019.02.001

Fernández-Rodríguez, E., & Martínez-Arias, A. (2012). Do business characteristics determine an effective tax rate? *The Chinese Economy*, *45*(6), 60–83. https://doi.org/10.2753/CES1097-1475450604

Fernández-Rodríguez, E., & Martínez-Arias, A. (2014). Determinants of the effective tax rate in the BRIC countries. *Emerging Markets Finance and Trade*, *50*(sup3), 214–228. https://doi.org/10.2753/REE1540-496X5003S313

Frank, M. M., Lynch, L. J., & Rego, S. O. (2009). Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, *84*(2), 467–496. https://doi.org/10.2308/accr.2009.84.2.467

Gallemore, J., & Labro, E. (2015). The importance of the internal information environment for tax avoidance. *Journal of Accounting and Economics*, *60*(1), 149–167. https://doi.org/10.1016/j.jacceco.2014.09.005

Gebhart, M. S. (2017). Measuring corporate tax avoidance – An analysis of different measures. *Junior Management Science*, *3*, 43–60.

Gottschalk, P. (2010). Categories of financial crime. *Journal of Financial Crime*, *17*(4), 441–458. https://doi.org/10.1108/13590791011082797.

Gupta, S., & Newberry, K. (1997). Determinants of the variability in corporate effective tax rates. evidence from longitudinal data. *Journal of Accounting and Public Policy*, *16*(1), 1–34. https://doi.org/10.1016/S0278-4254(96)00055-5

Herbert, T., & Overesch, M. (2014). How does aggressive tax planning of multinational firms affect accounting-based ETRs? *Working Paper.*

Halioui, K., Neifar, S., & Ben Abdelaziz, F. (2016). Corporate governance, CEO compensation and tax aggressiveness – Evidence from American firms listed on the NASDAQ 100. *Review of Accounting and Finance*, *15*(4), 445–462. https://doi.org/10.1108/RAF-01-2015-0018

Hanlon, M., & Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, *93*(1-2), 126–141. https://doi.org/10.1016/j.jpubeco.2008.09.004

Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, *50*(2-3), 127–178. https://doi.org/10.1016/j.jacceco.2010.09.002

Higgins, D., Omer, T., & Phillips, J. (2015). The influence of a firm's business strategy on its tax aggressiveness. *Contemporary Accounting Research*, *32*(2), 674–702. https://doi.org/10.1111/1911-3846.12087

Harris, M., & Feeny, S. (2003). Habit persistence in effective tax rates. *Applied Economics*, *35*, 951–958.

Jaafar, A., & Thornton, J. (2015). Tax havens and effective tax rates: An analysis of private versus public European firms. *The International Journal of Accounting*, *50*(4), 435–457. https://doi.org/10.1016/j.intacc.2015.10.005

Jennings, R., Weaver, C., & Mayew, W. (2012). The extent of implicit taxes at the corporate level and the effect of TRA86. *Contemporary Accounting Research*, *29*, 1021–1059.

Jindřichovská, I., Kubíčková, D., & Mocanu, M. (2020). Case Study analysis of sustainability reporting of an agri-food giant. *Sustainability*, *12*(11), 4491–4451. https://doi.org/10.3390/su12114491

Kubick, T., & Lockhart, B. (2017). Corporate tax aggressiveness and the maturity structure of debt. *Advances in Accounting*, *36*, 50–57. https://doi.org/10.1016/j.adiac.2016.10.001

Laguir, I., Stagliano, R., & Elbaz, J. (2015). Does corporate social responsibility affect corporate tax aggressiveness? *Journal of Cleaner Production*, *107*, 662–675. https://doi.org/10.1016/j.jclepro.2015.05.059

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, *30*(1), 50–70. https://doi.org/10.1016/j.jaccpubpol.2010.09.003

Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness, An empirical analysis. *Journal of Accounting and Public Policy*, *31*(1), 86–108. https://doi.org/10.1016/j.jaccpubpol.2011.10.006

Lazăr, S. (2011). Effective corporate income tax rate in Romania, A micro-backward looking approach. *Annals of the Faculty of Eonomics*, *1*(2), 361–366.

Lin, S., Tong, N., & Tucker, A. (2014). Corporate tax aggression and debt. *Journal of Banking & Finance*, *40*, 227–241. https://doi.org/10.1016/j.jbankfin.2013.11.035

Lipatov, V. (2012). Corporate tax evasion. The case for specialists. *Journal of Economic Behavior & Organization*, *81*(1), 185–206. https://doi.org/10.1016/j.jebo.2011.09.015
Mafrolla, E., & D'Amico, E. (2016). Tax aggressiveness in family firms and the non-linear entrenchment effect. *Journal of Family Business Strategy*, *7*(3), 178–184. https://doi.org/10.1016/j.jfbs.2016.08.003
Manea, A. C. (2011). Means and methods of preventing and combating tax evasion adopted by Romania and Moldova. *Bulletin of the Transilvania University of Braşov Series VII, pp. Social Sciences, Law*, *4*(53), 127–132.
Manea, C. A. (2015). Tax evasion in Romania – a national security issue. *Bulletin of the Transilvania University of Braşov, Series VII: Social Sciences*, *8*(57), 163–172.
Martinez, A. L. (2017). Tax aggressiveness: a literature survey. *Journal of Education and Research in Accounting*, *11*(special edition,6), 104–121.
McClure, R., Lanis, R., Wells, P., & Govendir, B. (2018). The impact of dividend imputation on corporate tax avoidance: The case of shareholder value. *Journal of Corporate Finance*, *48*, 492–514. https://doi.org/10.1016/j.jcorpfin.2017.10.007
Mills, L., & Newberry, K. (2001). The influence of tax and non-tax costs on book-tax reporting differences: Public and private firms. *Journal of the American Taxation Association*, *23* (1), 1–19. https://doi.org/10.2308/jata.2001.23.1.1
Mills, L., & Newberry, K. (2005). Firms' off-balance sheet and hybrid debt financing: Evidence from their book-tax reporting differences. *Journal of Accounting Research*, *43* (2), 251–282. https://doi.org/10.1111/j.1475-679x.2005.00170.x
Majeed, M. A., & Yan, C. (2019). Financial statement comparability and corporate tax avoidance: Evidence from China. *Economic Research-Ekonomska Istraživanja*, *32*(1), 1813–1843. https://doi.org/10.1080/1331677X.2019.1640627
Onofrei, M., Vintilă, G., Gherghina, ŞC., & Păunescu, R. A. (2016). Empirical study towards the drivers of effective corporate tax rate. *Transformations in Business & Economics*, *15* (39C), 413–430.
Onofrei, M., Vintila, G., Gherghina, S. C., Păunescu, R. A., & Oprea, F. (2018). Do firm characteristics influence effective corporate tax rate? Empirical evidence from a panel of former communist Eastern European markets. *Transformations in Business & Economics*, *17*(44B), 42–59.
Pana, I. (2019). Control and prevention of fiscal crime. *Bulletin of "Carol I" National Defense University*, *1*, 101–109.
Păunescu, R. A. (2019). *Analiza cotei efective de impozitare a profitului companiilor [Analysis of the effective corporate income tax rate]*. Editura Economică.
Păunescu, R., A., & Vintilă, G. (2018). Study of influence factors of effective corporate tax rate from the Baltic Countries. *Journal of Accounting and Auditing: Research & Practice*, *2018*, 1–20.
Perpelea, S. G., & Beldiman, D. (2016). Tax Evasion in Romania, pp. New Approaches. *Journal of Finance Challenges for the Future Universitaria Publishing House*, *16*(18), 109–117.
Popescu, A. M., & Cochinţu, I. (2014). Legal regulation of the fight against and prevention of tax evasion by ways of legislative delegation. Constitutional limits. *AGORA International Journal of Juridical Sciences*, *1*, 132–140.
Rego, S. O. (2003). Tax-avoidance activities of U.S. multinational firms. *Contemporary Accounting Research*, *20* (4), 805–833. https://doi.org/10.1506/VANN-B7UB-GMFA-9E6W
Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform, evidence from Australia. *Journal of Accounting and Public Policy*, *26*(6), 689–704. https://doi.org/10.1016/j.jaccpubpol.2007.10.003
Richardson, G., Lanis, R., & Leung, S. C. M. (2014). Corporate tax aggressiveness, outside directors, and debt policy. An empirical analysis. *Journal of Corporate Finance*, *25*, 107–121. https://doi.org/10.1016/j.jcorpfin.2013.11.010
Richardson, G., Lanis, R., & Taylor, G. (2015a). Financial distress, outside directors and corporate tax aggressiveness spanning the global financial crisis. An empirical analysis. *Journal of Banking & Finance*, *52*, 112–129. https://doi.org/10.1016/j.jbankfin.2014.11.013

Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of board of director oversight characteristics on corporate tax aggressiveness. An empirical analysis. *Journal of Accounting and Public Policy*, *32*(3), 68–88. https://doi.org/10.1016/j.jaccpubpol.2013.02.004

Richardson, G., Taylor, G., & Lanis, R. (2015b). The impact of financial distress on corporate tax avoidance spanning the global financial crisis. *Economic Modelling*, *44*, 44–53. https://doi.org/10.1016/j.econmod.2014.09.015

Siegfried, J. (1972). *The relationship between economic structure and the effect of political influence: Empirical evidence from the corporation income tax program* [Ph.D. dissertation]. cited in Stickney and McGee. (University of Wisconsin) (1982).

Socoliuc, M., Mihalciuc, C., & Cosmulese, G. (2018). Tax Evasion in Romania – Between Past and Present. In *The 14th Economic International Conference: Strategies and Development Policies of Territories: International, Country, Region, City, Location Challenges*, May 10-11, 2018, Stefan cel Mare University of Suceava, Romania, LUMEN Proceedings, 406-412.

Stickney, C., & McGee, V. (1982). Effective corporate tax rates – The effect of size, capital intensity, leverage, and other factors. *Journal of Accounting and Public Policy*, *1*(2), 125–152. https://doi.org/10.1016/S0278-4254(82)80004-5

Steijvers, T., & Niskanen, M. (2014). Tax aggressiveness in private family firms, An agency perspective. *Journal of Family Business Strategy*, *5*(4), 347–357. https://doi.org/10.1016/j.jfbs.2014.06.001

Șuvelea, M. (2014). Causes of tax evasion and how to reduce it. *Hyperion Economic Journal*, *4*(2), 54–62.

Țâiu, L., Dragotă, V., & Vintilă N. (2011). An observation on the effective tax rate for corporate income in Romania. *Economic Computation and Economic Cybernetics Studies and Research*, *45*(1), 91–106.

Taylor, G., & Richardson, G. (2012). International corporate tax avoidance practices: evidence from Australian firms. *The International Journal of Accounting*, *47,* 469–496.

Teodorescu, M., & Istudor, I. I. (2017). Effective tax rate of corporate income tax in the post-crisis period, the case of non-financial companies listed on the Bucharest Stock Exchange. *Ovidius' University Annals, Economic Sciences Series*, *17*(2), 655–661.

Thomsen, M., & Watrin, C. (2018). Tax avoidance over time: A comparison of European and U.S. firms. *Journal of International Accounting, Auditing and Taxation*, *33*, 40–63. https://doi.org/10.1016/j.intaccaudtax.2018.11.002

Ungureanu, M. A., Calugareanu, M., Caraus, M., & Bartalis, A. M. (2016). Conceptual approaches to tax evasion in Romania. *Romanian Economic Business Review*, *11*(3), 7–14.

Vintilă, G., Armeanu, D., Filipescu, O., Moscalu, M., & Lazăr, P. (2011). Fiscal policy impact upon European and National Entrepreneurial Environment. *Theoretical and Applied Economics*, *5*(58), 352–359.

Vintilă, G., Armeanu, D., Filipescu, O., Moscalu, M., & Lazăr, P. (2012). Study regarding fiscal policy – Corporative social responsibility correlation. *Theoretical and Applied Economics*, *4*(569), 5–16.

Vintilă, G., Gherghina, ŞC., & Păunescu, R. A. (2018). Study of effective corporate tax rate and its influential factors: empirical evidence from emerging European Markets. *Emerging Markets Finance and Trade*, *54*(3), 571–590. https://doi.org/10.1080/1540496X.2017.1418317

Vintilă, G., & Păunescu, R. A. (2016). Empirical approach for the US companies in dual perspectives: Effective tax rates and the remuneration of CEO. *Journal of Financial Studies & Research*, 1–10. https://doi.org/10.5171/2016.493082

Vintilă, G., Păunescu, R. A., & Ghergina, ŞC. (2016). Exploring the link between corporate governance characteristics and effective corporate tax rate: A panel data approach on U.S. listed companies. *Journal of Financial Studies & Research*, 1(2016), 1–20.

Vintilă, G., Păunescu, R., A., & Gherghina, Ş.C. (2017). Determinants of effective corporate tax rate. Empirical evidence from listed companies in Eastern European Stock Exchanges. [Special. *Theoretical and Applied Economics*, *XXIV*(Special issue), 37–46.

Whait, R., Christ, K., Ortas, E., & Burritt, R. (2018). What do we know about tax aggressiveness and corporate social responsibility? An integrative review. *Journal of Cleaner Production*, *204*, 542–552. https://doi.org/10.1016/j.jclepro.2018.08.334

Wilkinson, B., Cahan, S., & Jones, G. (2001). Strategies and dividend imputation: the effect of foreign and domestic ownership on average effective tax rates. *Journal of International Accounting, Auditing and Taxation*, *10*, 157–175.

Zeng, T. (2011). Institutional environment, inside ownership and effective tax rate. *Nankai Business Review International*, *2*(4), 348–357.