TAX AGGRESSIVENESS: THE EVIDENCE FROM POLISH LISTED COMPANIES

Alicja Brodzka*, Krzysztof Biernacki*, Magdalena Chodorek*

*Wrocław University of Economics, Wrocław, Poland

Abstract

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1. INTRODUCTION

Countries around the world traditionally treat tax planning as a permitted practice. However, more sophisticated tax planning structures, limiting the tax liabilities through solutions, admittedly, legal but in contradiction to the intent of the law, are considered adverse and aggressive, as "consistent with the letter but not with the spirit of the law". According to the definition of the European Commission, aggressive tax planning consists in taking advantage of the technicalities of a tax system or of mismatches between two or more tax systems for the purpose of reducing tax liability. Aggressive tax planning can take many forms. Its effects include double deduction (e.g. when the same loss is deducted both in the country of source of income, as well as in the country of residence) and double non-taxation (e.g. in the situation where the income not taxed in the country of source of income is also exempted in the country of residence) (European Commission, 2012).

Managers take a wide range of activities in order to minimize the tax liabilities of the enterprises that they manage. These actions are closely associated with the so-called tax risk. According to Neuman, Omer and Schmidt (2013), the tax risk refers to the potential that the selected actions or activities will lead to the tax result, which is different than originally expected.

Susel and Wolowiec (2009) understand the described phenomenon as the risk of dispute with

The purpose of the article is analyzing the impact of taxation on the effective income tax rates paid by Polish companies. The authors present the results of a study made on the biggest firms, listed on the Warsaw Stock Exchange and included in the WIG20 index. In the research they bring closer the concept of tax aggressiveness – by looking at the effective tax rates (ETRs) achieved by WIG20 companies in years 2010-2014. The study is structured into 5 groups, according to the industry in which the analyzed companies operate. The results prove the sectoral differences in the level of ETRs. While the financial enterprises pay relatively high taxes in relation to the achieved gross profit, the energy sector has a negligible rate of effective taxation. At the same time companies operating in fuel and raw materials industry achieve highly unstable effective tax rates.

Keywords: Tax Aggressiveness, Tax Compliance, Tax Risk, Tax Avoidance and Evasion

tax authorities. Depending on the attitude of the company, this risk may be twofold: pure or speculative.

The pure risk only carries the possibility of suffering a financial loss due to falling afoul of the tax authorities, if: (1) the operation of the company was illegal, but this illegality was unintentional (a mistake, ignorance, etc.); (2) the operation of the company was in accordance with the law (usually, it is stated by a court or a tax authority of a higher instance), but was not recognized as such by the tax authorities; (3) the operation of the company was in accordance with the law and it was recognized as such for some time by the tax authorities, but, later on, the authorities changed their position and a conflict arose.

The speculative risk also foresees, in addition to the option of loss, the opportunity to benefit. This type of risk is most often the result of a conscious decision – it is taken in order to gain; hence, the higher the tax risk, the greater the potential benefits. Under this definition, an intentional bending of the law or its avoidance by the company means taking the risk of a speculative nature.

For both types of risk, a realization of the potential reality – i.e. the possibility of falling afoul of the tax authorities – is random: unknown are both the time of the incident (the conflict), as well as its depth, i.e. the effects. These effects are mainly of the financial dimension (tax debt, financial sanctions), but it may also come to the loss of credibility. Both tax risks are associated with an uncertainty. The

speculative risk is related to the uncertainty of whether an unlawful act comes to light, the pure risk – the uncertainty is enshrined, in some measure, in the tax system.

In the study the authors raised the research question, whether Polish biggest public companies aim at minimizing their tax liabilities and as such undertake tax aggressive activities. In order to understand better the issue of tax aggressiveness, in Section 2 the Literature Review was made. Section 3 presents the data and the research design, whereas the empirical results are displayed in section 4. The conclusion follows in section 5.

2. LITERATURE REVIEW

In order to examine a relation between the tax policy of the enterprise, affecting the amount of regulated fiscal burdens and the tax risks taken, Guenther, Matsunaga and Williams (2013) used the concepts of tax avoidance and aggressive tax practices, which afterward were compared to the accompanying risk of dispute with tax authorities. The first concept is the tax avoidance, succinctly defined as taking solutions within the applicable law, intended to lead to a reduction of the income tax paid by the company. Guenther, Matsunaga and Williams adopt a cash effective tax rate (Cash ETR) received by comparing the amount of the tax paid in a given period with the income before taxes and special items as a measure of tax avoidance. They point out that low effective tax rates mean the ability of the company, in the long term, to reduce the amount of the tax due from each cash-generating unit, before taxation. Cash ETR may be estimated on an annual basis, but earlier studies of Dyreng, Hanlon and Maydew (2008) recommend the use of five-yearperiod data for the comparison in order to obtain a better picture of tax policies applied by the business entities.

A policy of lowering the effective tax rates may consequently lead to the increase of the tax risk, if the actions taken have inherently risky motives. On the other hand, Dyreng, Hanlon and Maydew (2008) indicate that the ability to avoid tax may constitute a steady trend in the long term. In this case, a relatively constant effective tax rate will not attract attention due to the absence of sudden changes; thereby, the aggressive tax practices of the company will not be burdened with a higher tax risk.

The second concept is tax aggressiveness, defined by Guenther, Matsunaga and Williams as the scale of involvement in the operation, which - in case of fiscal audit - will be questioned. The previously described tax avoidance is characterized by moderate solutions that, leading to a reduction in the tax burdens, will not cause controversy in case of control. An example would be to register a subsidiary in a jurisdiction with low tax burden, the use of accelerated depreciation options or the use of tax reliefs permitted by law for the purchase of new technologies. On the other hand, if the company decides to reduce the tax burden by engagement in activities or over interpretation of the tax regulations that will probably be challenged in the course of the audit, then it is considered to be tax aggressiveness, as Dyreng, Hanlon and Maydew indicate.

Defined in the tax interpretation No. 48, published in July 2006 by the Financial Accounting Standards Board, the so-called Reserves for Unrecognized Tax Benefits (UTBs) are an attempt of the empirical measure of tax aggressiveness applied in the United States (FASB, 2006). Interpretation of the "Accounting for Uncertainty in Income Taxes" standardizes the way of recognition in the financial statements of so-called uncertain tax positions (UTP) regarding CIT tax and determines ways of measuring the probability of materialization of the uncertain positions in the form of a higher tax claims. According to the interpretation, the companies are required to: (1) identify all significant tax risks in terms of the corporate income tax, and then (2) make a quantification of these risks by determining the amount of potential risk regarding individual transactions. The next step is (3) estimation of the possibility of materialization of these risks. Determination of the appropriate factor, in a consequence, affects the amount of the provision set up (Wacławek, 2006).

FIN 48 interpretation was created in order to reduce the practice of minimizing the tax burden through the methods for which the probability of their acceptance in case of control is rather low. Aggressive tax policy, reflected in the high level of UTB reserves, may increase the risk of the company, if there is indeed a high degree of uncertainty regarding the future tax payments. However, despite the name, it is not clear whether the reserves for unrecognized tax benefits actually reflect uncertainty about the future tax payments of the company. As mentioned above, consistent and consequently applied rules of conduct (even aggressive), can lead to predictable (lower) tax payments and the lack of variation is defined as a factor reducing the risk of control. Moreover, control and verification of precarious positions by means of checking activities and of the possible legal process can take many years. In addition, the method of determining the reserves for unrecognized tax benefits is subjective, and thus used in different ways by business entities. These elements are indicated by Guenther, Matsunaga and Williams (2013) as a weakness of the UTB reserves being a measure of tax aggressiveness.

One of the consequences of the actions taken by managers in order to optimize tax liabilities is an impact on the company overall risk. As a result indicate Dyreng, Hanlon, Maydew (2008), managers in their decisions must take into account both the benefits from the increased financial flows related to the reduction of taxes, and the costs of the increased tax risk. In their research, Hutchins and Rego (2012) assumed that the tax risks affecting the shareholders' perception of the general company's risk may lead to an increase in the cost of capital for the company. In their analysis, they paid attention to the weakness of the assumptions - the relation between the tax risk and the cost of capital is not explicit, it is, in fact, a kind of peculiar risk that investors may avoid by the use of diversification activities. Moreover, the empirical measurements of the cost of capital relate the current share price to the future earnings, subjectively expected by the analysts. As a result, the provision for unrecognized tax benefits reflects the tax benefits that, by definition, have not been recorded in the revenues of



the company and, as such, do not affect the analysts' forecasts; therefore, it is not clear why, in a procedure of estimating the share price, the discount rate for future profits should be increased by a tax risk.

Another measure used by Hutchins and Rego (2013) to estimate the uncertainty was the variability of the rate of return on shares. It is a more direct – although used ex-post – measure of the uncertainty associated with the net profit streams. The analysis confirmed that the high volatility of the taxable cash flows is reflected in variations in the rate of return on shares, regardless of the impact of the tax risk on the expense of the company's capital.

Guenther, Matsunaga and Williams (2013) confirmed in their research that tax risk is positively correlated with the risk of the company. However, they did not confirm that tax avoidance and high tax aggressiveness contribute to the increase in the overall company risk. The explanation is the stability of the tax payments. Consistent application of strategies that reduce tax liabilities, predictable (even if lower) effective tax rates and maintaining high UTB reserves for uncertain tax positions do not affect the volatility of the rates of return on the company's shares. The findings suggest that the tax policy of the company may be reflected in an increase in the overall risk only if it contributes to an increase in the uncertainty about the future tax payments in the company.

3. RESEARCH METHODOLOGY

So far, scientific studies in Poland are not concerned with analyzing, in a systematic way, the impact of taxation on the effective income tax rate paid by the company. It is possible to find press releases pointing out the payment of the CIT burden according to lower rates rather than the nominal, statutory 19% rate (Kowalczyk 2014, Skwirowski 2014).

This research, presented it this paper, analyzed the amount of the corporate income tax paid by the companies listed on the Warsaw Stock Exchange (WSE) and included in the valuation of the WIG20 index. WIG20 index is based on twenty major and most liquid companies in the WSE Main List. In order to be included in the index, the company has to fulfill additional criteria: (1) number of shares in free float higher than 10%; (2) value of shares in free float higher than EUR 1 mln; (3) the company cannot be marked in any specific manner (eg. bankruptcy); (4) the company may not be eligible to the Alerts List segments nor assigned to the Lower Liquidity Space. Those criteria ensure that only big and stable firms can be included into the index. Additionally, WIG20 is a price index and thus when it is calculated it accounts only for prices of underlying shares whereas dividend income is excluded. The WIG20 index may not include more than 5 companies from a single sector.

The research used annual financial statements of surveyed entities, in particular the annual income data (in balance sheet recognition), tax amounts, both paid and deferred, as well as other information contained in the published reports related to income tax settlement. Intrinsically, the subject of the analysis regarded the corporate income tax (CIT) only. The analysis covered the period 2010-2014. The methodology used in the research was based, in the wake of the work of Guenther, Matsunaga and Williams, on a comparison of the current amount of tax paid in a given fiscal year in relation to the annual income reported in the financial statements. In Poland, the financial statements are based on the Balance Sheet Accounts Regulations¹; the companies listed on the regulated market may apply international accounting standards (Art. 45, par. 1a UoRach). For these entrepreneurs, the national balance sheet regulations apply to the unregulated matters (Art. 2, par. 3 UoRach).

For the sake of the study, it was assumed that the balance sheet gross income shown (before taxation) is a reliable reflection of the company's assets increased within a given period and – in the absence of separate tax regulations defining the tax base – should be taxed at a nominal rate. In Poland, tax regulations admittedly impose an obligation to keep the accounting records, although, the tax base is determined by itself, based on the provision of tax laws (see Art. 9 CIT²). This means that there exists a dichotomy in the determination of the income for the purpose of the balance sheet and the tax assessment.

In practice, the entrepreneur, while determining the taxable income, makes corrections for the tax purposes on both the revenue and the costs. Taking into account the analyzed financial statements of the surveyed companies, corrections related to the socalled permanent differences and the deferred tax. The first of these categories is the difference resulting from the recognition of certain revenues and expenses differently for the purpose of the balance sheet and the tax. A good example is the tax limit on car depreciation, where the depreciation write-offs may be deductible only to the initial value of a passenger car, not higher than the equivalent of EUR 20 000 (Art. 16, par. 1, item 4 CIT). The deferred tax is a temporary difference, entered in the accounting ledgers, one that - due to differences in the law increases or decreases the actual amount of the tax to be paid for the given fiscal period. In the long term the provision and assets for the deferred income tax will be equal to the amount of tax to be paid, as they reflect only a shift in time of such a payment.

Quantification of the final effective tax rates took place by determination of the quotient of the amount of the tax actually paid in a given period and the gross income declared according to the Balance Sheet Accounts Regulations. This approach shows the final size of the tax burden on the income received and has been used in the described research.

4. EMPIRICAL RESULTS

The results of the analysis were divided into five groups, dependent on the firm's sector. Preliminary analysis showed a strong relation between the effective tax rates and the industry in which the company operates.

In the first group the WIG20 firms from the financial sector have been studied. The effective tax

¹ The Act of 29 September 1994, on Accounting (Dz. U. No. 121, item 591, as amended, hereinafter referred to as UoRach) with its implementing legislation and a document, not being a legal act itself, but having a significant impact on the principles of reporting, the National Accounting Standards.

² The Act of 15 February 1992, on the Corporate Income Tax (i.e., Dz. U. 2014, item 851, as amended, hereinafter referred to as CIT).

rates of the analyzed companies, for years 2010-2014, have been presented in Table 1.

 Table 1. Effective income tax rates of the financial sector entities listed on the WIG20 index

	2014	2013	2012	2011	2010
PKO BP	22.66%	15.72%	17.85%	18.52%	24.73%
PEKAO	21.95%	17.33%	20.00%	21.84%	23.05%
BZ WBK	34.71%	14.62%	24.60%	15.41%	23.88%
Alior Bank	22.37%	17.12%	28.46%		
PZU	5.98%	6.58%	9.96%	10.30%	5.41%

Source: Authors' own research based on the individual annual financial statements

Effective rates in this group are similar or higher than the nominal rate. Fluctuations in particular years are significant but there is no uniform trend over the next periods. An exception is PZU, which, as a company running the business of insurance, differs in relation to the banking entities in terms of taking into account the tax rules for certain reserves as deductible expenses. Moreover, it is worth to mention that in the analyzed periods both banks and the insurance company achieved relatively high gross profits from their business activity.

The next step was analyzing the effective tax rates achieved by the WIG20 companies from the energy sector, in years 2010-2014. The results were presented in Table 2.

 Table 2. Effective income tax rates of the

 energy sector entities listed on the WIG20 index

	2014	2013	2012	2011	2010
TAURON	0.65%	1.38%	0.49%	4.52%	6.78%
PGE	1.92%	9.19%	16.89%	7.74%	2.90%
ENERGA	0.00%	0.00%	0.00%	0.66%	
ENEA	1.79%	6.02%	3.87%	13.52%	-15.26%

Source: Authors' own research based on the individual annual financial statements

The businesses from the energy sector showed little or negligible profits; in one year (2010) the ENEA Company reported a loss, noted in Table 2 as a negative value. Low values of ETR were justified by low profits with a relatively high income. The data in Table 2 are justified by the nature of the industry in which the analyzed companies operated.

In Table 3 there were presented the effective income tax rates of the WIG20 companies operating in fuel and raw materials industry, reported in years 2010-2014.

Table 3. Effective income tax rates of the fuel &raw materials sector entities listed on the WIG20index

	2014	2013	2012	2011	2010
PGNIG	-18.00%	-21.30%	15.35%	14.73%	18.63%
LOTOS	-0.01%	0.56%	-0.09%	0.00%	2.41%
ORLEN	-0.04%	14.87%	10.22%	33.57%	13.90%
KGHM	25.37%	32.75%	42.82%	9.41%	11.75%

Source: Authors' own research based on the individual annual financial statements

The results of the analysis revealed highly unstable effective tax rates, which were achieved by companies operating in fuel and raw materials industry. The phenomenon can be justified by the economic situation on the commodity market that was reflected in companies' financial results. Special attention should be given to KGHM (raw materials industry), which, as the only company in Poland, is burdened by a selective tax on extraction of certain minerals.³ Until this very day the tax is levied on the extraction of copper and silver, and the sums paid cannot be treated by a company as tax deductible costs and do not minimize the tax base. In the result the "extractive" tax significantly affects the effective tax rate. Its introduction in 2012 led to a great increase of KGHM's effective tax rates, from 9.41% in 2011 to 42.82% in 2012. In subsequent years the tax rate has been reduced, mainly due to the declining size of revenues generated by this firm.

The next group taken into account in the research gathers the WIG20 companies that operate is the retail sector. The Table 4 presents the effective income tax rates reported in years 2010-2014 by firms from this group.

Table 4. Effective income tax rates of the retailsector entities listed on the WIG20 index

	2014	2013	2012	2011	2010
CCC	18.02%	14.58%	20.13%	19.56%	22.49%
EUROCASH	0.87%	-13.71%	-0.08%	-27.93%	-16.06%
LPP	28.25%	18.54%	13.72%	20.13%	21.53%
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Source: Authors' own research based on the individual annual financial statements

Unlike the companies presented in Tables 1-3, the retail sector included in the WIG20 index is characterized by both the private origin of the capital, which created this sector, and the impact on the management of domestic natural persons. It means that functioning of these entities is mostly influenced by the economic and financial factors, and not political aspects, as it takes place in companies of the above-mentioned industries. Some of them were treated in the analyzed periods as companies of strategic importance for our country (The Polish Minister of Treasury, 2014).

Particular attention should be paid to the LPP and CCC Companies. These companies have taken up the strategy of the foreign expansion. As a result their products, sold under their own, well-known brands, are available in the countries of Central and Eastern Europe; they also open their branches in major cities of Western Europe. Such development led to a competition with other international trading networks, which resulted in taking the tax optimization measures.

A good example is a case of the LPP Company. In 2011 the company transferred the rights to its trademarks (valued at over PLN 500 million) to a Cypriot company called Gothals, which, in turn, moved them further, to the Jaradi Limited Company, registered in the United Arab Emirates. Under the agreement, Jaradi licensed the Gothals Company and Gothals next transferred the rights back to LPP. The Cyprus income tax rate in the period was at 12.5%, while in the UAE at 0% for this type of income. Such actions were justified by the LPP management by a desire to reduce the operating costs, among which the tax to be paid was one of the essential elements. Eventually, the company withdrew from the tax

³ The Act of 2 March 2012 on the tax on mineral extraction (Dz. U. item 362, as amended).

optimization solution. This step has been reflected in the effective income tax rates.

	2014	2013	2012	2011	2010
GPW	3.42%	1.67%	18.16%	17.96%	13.77%
ASSECO POLAND	8.34%	15.62%	14.22%	15.31%	-13.87%
CYFROWY POLSAT	-1.11%	3.93%	1.10%	0.00%	2.57%
ORANGE	0.51%	-0.51%	-1.83%	2.12%	4.18%

Table 5. Effective income tax rates of the otherentities listed on the WIG20 index

Source: Authors' own research based on the individual annual financial statements

The last analysis was led on the group of other entities listed on WIG20 index, not included in previous groups. Their effective tax rates for the years 2010-2014 were presented in Table 5.

The last group of the analyzed companies is not homogeneous. The similarity is evident in the case of Cyfrowy Polsat and Orange, which operate in a similar sales structure. A GPW situation is quite different. In this dominant company of the Warsaw Stock Exchange Group, a substantial share of its equity (35%) is owned by the State, which additionally holds the preferred shares. In case of GPW the particular attention should be paid to a significant decrease in the effective tax rate starting in 2013. The decrease was a result of clearing the expenditure that - under the national tax regulations - could be immediately and entirely deducted from the tax base. It makes the GPW case the good example of how relevant tax regulations may be for the effective tax burden levied on the enterprise income.

5. CONCLUSION

The analysis of the financial reports of biggest companies listed on Warsaw Stock Exchange allow for demonstrating the general findings related to the effectiveness of the taxation of companies operating in different industries. The results of the study show that there is an apparent link between the total amount of tax burden and the type of business activity. The companies of the financial sector particularly in the banking segment - pay relatively high taxes in relation to gross profit they achieve. At the same time the energy sector reports negligible rates of effective taxation. This phenomenon may be explained by high investments in the infrastructure, that the companies of the energy industry are forced to bear. This group is particularly vulnerable to political decisions, due to the engagement of the State in the companies' equity. The State's influence on business is also very visible in case of KGHM - the only company in Poland that is burdened with additional "extractive" tax, which practically excludes the possibility of reducing the public and legal burdens. KGHM is internationally active and undertakes activities related to the foreign entities of the extractive sector, in order to improve its competitive position; high tax burdens may be a permanent brake on such efforts.

The impact of the international competitiveness is also visible amongst companies of the distribution sector; with the LPP tax optimization case, justified by the desire to reduce the effective tax rate in order not

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to lose its competitive position. These taxes aggressive practices, although abandoned by the LPP Company, can however be used in the future – especially by those firms that want to gain a competitive advantage in relations with other, international players.

This research is an introduction to wider studies on the effectiveness of the taxation and the level of tax aggressiveness of Polish companies. Results achieved so far will constitute the base for further analysis, led within the framework of selective sectors and industries of Polish economy.

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