Teka Komisji Prawniczej PAN Oddział w Lublinie, vol. XVII, 2024, no. 1, pp. 137-150 https://doi.org/10.32084/tkp.8567

MARKET RESPONSES OF CONSUMERS AND ORGANIZATIONS TO TAXATION IN THE CONTEXT OF MANAGERIAL DECISION-MAKING PROCESS

Dr. habil. Włodzimierz Martyniuk, University Professor

WSEI University in Lublin, Poland e-mail: wlodzimierz.martyniuk@wsei.lublin.pl; https://orcid.org/0000-0003-4139-0554

Dr. Lyubomir Antonov

Varna Free University "Charnorizetz Hrabar" in Varna, Bulgaria e-mail: lyubomir.antonov@vfu.bg; https://orcid.org/0009-0006-6238-9017

Dr. Dawid Jakimiec

WSEI University in Lublin, Poland e-mail: dawid.jakimiec@wsei.lublin.pl; https://orcid.org/0000-0002-1310-3944

Artur Grzesiak, MA

WSEI University in Lublin, Poland e-mail: artur.grzesiak@wsei.lublin.pl; https://orcid.org/0009-0001-3691-1194

Abstract. Managers of business entities must consider tax regulations in their decision-making processes. If the tax system is characterised by high tax rates, the following effects should be expected: a weakening of the economic growth rate, the development of the economic "grey zone", the outflow of capital abroad while limiting the inflow of external capital. With regard to enterprises, three basic economic effects of taxation can be distinguished: in terms of liquidity, property and organisation. The article discusses models of theoretical forms of reducing the tax burden, thus drawing attention to the significant role of tax planning by business entities, in the context of both the domestic and the international markets.

Keywords: tax law; financial law; tax liability; financial policy; decision making; tax management; process management.

INTRODUCTION

Making rational decisions in an enterprise, both current and strategic, requires knowledge and taking into account external conditions of the business.





The accuracy of decisions made, as well as the ability to adapt to the changing external environment, determines not only the effectiveness of functioning enterprise, but also about its ability to continue its operations. Taxpayers often find themselves in a situation that generates the need to make quick decisions and implement economic actions. It is therefore worth referring to three interrelated microeconomic issues, i.e. rationality of expectations, rationality of conduct (economisation of actions) and economic calculation. The starting point is to define the concept of rationality as conduct based on the principles of correct thinking and effective action. Thus, the rationality of expectations refers in the microeconomic dimension to the behaviour of households and enterprises, assuming that market actors will behave rationally, i.e. that they are able to rank their preferences from most to least preferred and act under market conditions according to these (established) priorities. The recognition of the fact that state economic policy is partly dependent on the extent to which consumers correctly anticipate its effects and act in accordance with their own predictions is an important contribution of rational expectations theory [Feldstein and Samwick 1996, 5-10].

The tax system significantly affects the material and legal situation of households (through the level and nature of fiscal burdens and the taxation structure) and business entities (constituting a cost element for companies and their owners). Managers of business entities must take tax regulations into account in their decision-making processes. Bearing in mind that in a market economy the profit motive is the basic premise of economic development, the tax legislator must be aware that only a specific part of the national product gross can be (is) taken over by taxes without causing negative financial and economic effects. The creators of the tax system should therefore take into account the fact that each tax burden is treated by the entity as a reduction of its current or future status. "High rates taxation, the following effects should be expected: a weakening of the economic growth rate, the development of the economic "gray zone", the outflow of capital abroad while limiting the inflow of external capital. Legal regulations that create the framework for the functioning of business entities and the taxation of income and capital of households have a significant impact on market power, consumer and investment expenditure, enterprise development and economic growth" [Wołowiec, Skica, and Gercheva 2014, 52-64].

One of the most controversial issues in economics is whether it is possible to stimulate economy to quicker growth rate by lowering income taxes. In "2000 two authors, J. Agnell and M. Persson published the paper in which they checked the effects of tax reduction on economic growth rate based on endogenous growth model, checking in this way the potential effect of Laffer" [Agnell and Persson 2000, 1-25]. The authors verified potential effects of tax reduction among 16 OECD countries and basing on simulation

on an econometric model they reached the conclusion that the best growth effects can be obtained by lowering taxes in Sweden, Finland and Denmark, that is countries with the highest tax and para-tax burden. The authors also indicated that the effect of economic growth acceleration depends on policy concerning public expenditure adopted by the governemnt. It is generally possible only in conditions in which after the period of public expenditure acceleration they are experiencing slow-down. If we assume that period after period the share of government expenditure in GDP increases, lowering taxes will not influence the economic growth rate. This conclusion seems obvious. Tax reductions, according to Laffer's concept, are made in order to enhance dynamics of private sector development at the costs of public sector, which requires limiting the public expenditure growth rate (or even their stagnation or reduction).

The height of tax rates and the nature of income tax rates table can be a factor affecting job turnover. This issue has been analyzed by two economists: W.M. Gentry and R.G. Hubbard, who wrote a book on this topic [Gentry and Hubbard 2002, 1-43]. They analyzed relations between tax rates, tax roundness and Job Turnover based on TAXISM model used by National Bureau of Economic Research. As the authors pointed out, job turnover affects both rate changes and roundness of tax table (measures of progressiveness). "We estimate that a 5% reduction of extreme tax [...] increases the likelihood of moving to a better job by 0.79%, while decreasing the tax system roundness measure by 3.12% (the value of one standard deviation) increases the likelihood of moving to a better job by 0.86% [...]. For married men these results are slightly higher" [ibid., 33]. This means that tax reductions encourage seeking a better job as employees are certain that possible additional pay will not be covered with higher tax rate. These results show that tax reductions positively motivate employees and this influence is statistically significant. We can also formulate a conclusion that the less progressive the tax system, the greater inclination to look for a better job. The authors also stated, quoting another research of theirs [ibid., 1-10], that the roundness (progressiveness) of tax system exerts relatively large negative influence on entrepreneurial decisions, such as entering a new market.

An important factor determining the height of optimal tax rates is labor supply and its indirect measure – taxable income. The issue of the power of labor supply reaction and, what is connected with it, taxable income, on changes to tax rates is a key dilemma in the theory of optimal taxation. Full measure of taxable income flexibility level was performed in American conditions by J. Gruber and E. Saez [Gruber and Saez 2000, 3-38]. Their research covered the period of 1980s, the time of significant reductions of federal and state taxes. They used a full panel of observations covering data from 46000 tax return forms from 1979-1990. Research showed that

flexibility of taxable income grows along with income growth. So taxpayers from higher tax ranges strongly react to increasing and decreasing tax rates. General flexibility of taxable income to tax rate changes is mostly determined by taxpayers from the highest income group. These results indicated also that in American reality, in 1979-1990, as a result of implementing the tax reduction program, especially for the highest income group, the growth of taxable income in the highest income groups caused major growth of global taxable income.

A. Goolsbee [Goolsbee 1997, 1-35] in his book *What Happens When You Tax the Rich? Evidence from Executive Compensation* deals with a fascinating issue of how taxable income of stock exchange companies boards reacts to changes to extreme tax rates in personal income tax. The author used the data provided by companies obliged to do so by securities regulations in the USA: stock exchange companies have to inform about remuneration of five most important representatives of the board. The survey covered the period of 1991-1995.

G.D. Myles [Myles 2000, 141-68] made a review of growth models from the perspective of the influence taxation has on economic growth. He proved that in theoretical models we can isolate a series of channels through which taxation may influence growth and that this influence can be significant. Some models predict that the growth effect is minor, other predict that it could be major. What differentiates these models is the number of key parameters, especially physical capital share in generating human capital, flexibility of usefulness function and depreciation rate. In principle, these figures could be isolated empirically and the size of growth effect precisely determined. However, in order to do so, one would have to make a review of a series of fundamental issues concerning model assumptions.

On the other hand, as shown by Mendoza, Milesi-Ferrati and Asea in their models of regression, relation between taxation and economic growth rate is small [Mendoza, Milesi-Ferrati, and Asea 1997, 119-40]. Contrary evidence was supplied by Leibfritz, Thronton and Bibbee [Leibfritz, Thorton, and Bibbee1997, 1-20]. They calculated that in OECD countries in 1980-1995, the growth of tax rate by 10% was accompanied by the decline of economic growth rate by 0.5%, with direct taxation limiting this growth more than indirect taxation. The quoted research provides one clear conclusion. Economists cannot unequivocally determine how taxation affects economic growth rate in the long term. The proofs that taxation considerably influences growth rate are weak. Such conclusion may be shocking, but on the basis of current results of economic research we cannot make any other conclusion.

Taxpayers' reactions are dictated by their subjective perception of the tax burden, which is expressed as the amount of taxes that reduce the taxpayer's

income, being the difference between the income that would be available to the taxpayer if no tax had to be paid and the actual income available to the taxpayer after paying taxes. These taxpayer responses determine both economic and political incentives [Gomułowicz and Małecki 2011, 110-11]. Every form of taxation carries with it the effect of reducing the income that the individual expected to obtain from the original appropriation, production, or exchange. Since these activities require the use of scarce resources - such as time and the use of one's body - that could have been used for consumption or leisure, the opportunity cost of these activities increases. The marginal utility of appropriation, production and exchange becomes lower and the marginal utility of consumption or leisure becomes higher. Thus, by forcibly transferring valuable, not yet consumed goods from producers (production in a broader sense also includes primary appropriation and exchange) to people who have not participated in production, taxation reduces the current income of producers and their potential level of consumption. Moreover, the current incentives for future production of valuable goods also weaken, with a consequent reduction in future income and levels of future consumption [Wołowiec 2019, 237-47].

1. PURPOSE OF ARTICLE, CRITERIA OF ANALYSIS AND RESEARCH METHODOLOGY

The social sciences use the typical methods found in the social sciences and humanities, i.e.: the study of documents (legal acts, expert reports, opinions, analyses), comparative methods (scientific articles, reports, analyses derived from linguistic, grammatical and historical interpretation) and case studies. The result of cognitive research is new claims or theories. The article is written according to the traditional methods used in legal research sciences, linguistic analysis (dogmatic-legal method and linguistic-logical method), and comparative (comparative) and economic method of legal analysis.

2. TAXES VERSUS MANAGERIAL DECISIONS

Decision-making is a procedural feature of the management process with multiple economic and psychosociological determinants. Decision-making can be considered in two senses . In a broad sense, it is a complex process consisting of the recording and grading of information, the identification of the decision problem and the application of the adopted selection criterion, the definition and issuing of the decision (decision task) and the recording of information on its execution. In the second – narrow – sense, decision-making is only one stage of the decision-making process and implies a

conscious act of will by the decision-maker making a non-random selection of one, from a set of possible options for solving the decision problem (these options must, of course, be identified or designed in advance). "The company existence in the long run depends on activities adjusting it to changing environment. Adaptation activities taking place both inside the company and in all its contacts with the environment, can also be forced by fiscal policy of the economy" [Wołowiec 2009, 185-203].

Tax system significantly influences material and legal situation of households (through the level and nature of fiscal burden and taxation n structure) and economic entities (being a cost element for companies and their owners). Thus running business entities must take tax regulations into account in their decision-taking processes. Remembering that in market economy the profit motive is a fundamental premise for economic development, tax legislators must be aware that only a part of gross domestic product may be (is) taken over by taxes without causing any negative financial or economic effects. Creators of tax system should take into consideration the fact that each tax burden is treated by entities as lowering their current and future wealth status. If there are high tax rates in the tax system, we can expect such effects as: weakened economic growth rate, development of 'grey zone' economy, capital flow abroad and simultaneously limited inflow of capital from outside. Legal regulations providing frameworks for operations of economic entities and taxation of income and capital owned by households significantly influence market forces, consumption and investment expenses, development of enterprises and economic growth [Wołowiec 2017a, 173-96].

With reference to companies we can distinguish three elementary economic effects of taxation: those regarding liquidity, assets and organization. Personal and corporate income taxes mainly negatively influence entrepreneurs' liquidity, as they lead to definite burden placed on the entrepreneur (taxpayer). Both personal and corporate income taxes are 'expenses' which are not costs of obtaining revenue and they lower company liquidity. Company liquidity is affected by the way of determining tax base alone. If taxable revenues from conducted economic activity are due revenues, even if they have not been obtained yet, while payments received for deliveries of goods and services to be performed in the next tax years do not constitute taxable revenue in a year in which they have been obtained. This means that usually revenues and costs are determined on the basis of the accrual method. The appearance of dues from, for example sales on installment basis leads to appearance of revenue on the day the invoice was drawn, not later than on the last day of the month in which the goods were delivered. The appearance of due revenue leads to origin of tax obligation, usually in form of down-payments during the tax year, even though the taxpayer

has not received the payment yet. With reference to revenues from interests, exchange rate differences determined on tax principles and compensations and contractual penalties, the legislator usually adopts the cash rule of revenue origin. This means that the revenue and the obligation to pay tax appear at the moment of receiving money. Also personal tax returns do not lead to improved liquidity, as tax return (inflow) is preceded by too high liquidity of tax (expense), which causes negative effects in liquidity. Company liquidity is also affected by the way of calculating irrecoverable claims in costs of obtaining revenue [Hundsdoerfer and Jamroży 1999, 13-17]. If these claims are tax cost only at the moment of obtaining a confirmation (decision) that they are irrecoverable, issued by the enforcement organ, or a court decision to reject the motion for bankruptcy or for discontinuing bankruptcy proceedings covering liquidation of assets [Sokołowski 1995, 12-15]. Taking into account the fact that the process of documenting irrecoverable claims may last several months, this may generate negative interest effect, resulting from the length of time between the day of paying tax on due revenue and the day of accepting the claim as tax costs and lowering the size of tax burden. Also the process of making the claim causes some additional (non-tax) payments (expenses on the proceedings, enforcement and others) [Kudert and Jamroży 2007, 5-19].

On the other hand, an entrepreneur has depreciation write-offs at their 'disposal', that is tax costs affecting lower tax base, which are not tax expenses. Taxpayers may make depreciation write-offs on fixed assets and intangible assets following allowed methods and depreciation rates. Postponing tax payments is possible through: using the digressive method, one-off depreciation write-offs, increasing depreciation rates, determining individual depreciation rates and choosing the method of valuation for homogenous, material elements of current assets (FIFO, LIFO, weighted average). In many legislations reserves and updating write-offs are treated as tax costs which do not cause tax appearance [Wołowiec 2017b, 29-45].

The size of tax expenses is also affected by activities related to balance sheet events. Transferring or increasing tax costs takes place within the possibilities offered to the taxpayer in form of the right to choose or decide, for instance what method of fixed assets depreciation to choose. The taxpayer may also have some freedom in determining the costs of generating fixed assets, depending on the adopted method of cost calculation. Restructuring activities in an enterprise also influence liquidity in the area of income taxation. The selling of an enterprise generates disclosure of quiet reserves included in the assets of the sold enterprise and growth of company value, which is translated into taxation of income generated as a result of the sale. Taxation of quiet reserves may be a factor limiting such transactions (the socalled *asset deal*). It is possible to avoid paying taxes on the day of selling the company by contributing the company as monetary contribution, which postpones taxation until the shares obtain in return for contribution in kind are sold. Reliefs of this type can be divided into: facilities in payment which do not lower the amount of paid tax, decreasing the amount of paid tax and exemptions from payment of tax. This can be illustrated with the following example showing the influence of taxation and transfer of tax payments on maintaining liquidity.

3. THE POLICY OF SHOWING INCOME IN CASE OF RESIDENTS

The policy of showing income (in case of residents) allows to move in time taxable incomes in order to minimize discounted value of income tax, due to the periodical nature of tax payments. We should assume that there are no relations between paid income taxes and other non-tax cash flows. In case optimization (decreasing) of paid income taxes may influence changes of other – non-tax – cash flows (for example size of net revenue from hotel services sale), the goal of minimizing discounted value of tax payments is not always balanced with maximization of current net value. So limiting only to minimization of income taxation could lead to resignation from generating incomes.

Within the policy of showing income we can discern activities aimed at shaping the actual state and its interpretation. Shaping the actual state, an entrepreneur may take up actions leading to appearance of some future events, thus changing the actual state circumstances. Within the interpretation of the actual state, activities may concern the right to present past factual states in the balance account and at the same time they may provoke different tax effects. The effect of the policy of showing income is the implementation of the process of moving incomes (paid income tax) in time, which may result in the tax rate effect, interest effect or progression effect. Tax rate effect is the consequence of changes to tax rates or scales. For example, if the rate(s) of personal income tax are supposed to (may) be lowered next tax year, it is rational to move some (all) incomes to the next tax year. Interest effects depend on the applied means within the policy of showing income. In a situation when incomes are moved due to due to interpretation of actual state, there are differences in tax burden, leading to temporary tax savings. Tax savings may be put on a deposit account generating tax interest effect. In case of moving incomes in the shaping actual state effect, there might also be differences in tax burden, leading to temporary tax savings. Generated savings may also be put on bank deposit account and generate the tax interest effect. Moreover, regardless of the tax aspect, there might be non-tax interest effect visible [Zhuravka, Filatova, Šuleř, et al. 2021, 65-75].

So, if the taxpayer arranges delivery of goods in the new tax year rather than in the current one, the payment for goods will be postponed by one month and showing particular income will be postponed by a year (assuming that the taxpayer uses the down-payment form of settling taxes). Such behavior shapes two contradictory effects. One hand, there is a delay of income tax payment for a year, and taking into account particular tax rate(s) and market interest rate, we experience tax interest effect - the discounted value of tax payment is decreased. On the other hand, postponing payment for goods results in appearance of negative non-tax interest effect in shape of decreased current net value before taxation. With moved incomes, progression effect will only appear in case of progressive tax scales used in constructing income taxes. With the implementation of the policy of showing income using the means of interpretation of actual state, only tax interest effect will be visible. As discounted value of tax payments decreases as we move forward the payment of tax, the taxpayer should aim at delaying the moment of showing the whole (part) of taxable income. Comparing discounted tax rates for particular periods, we should break down (dispose of) income so that it is taxed in periods with the lowest discounted tax rate. Using the shaping of actual state we achieve the same effect (with proportional rates), the only difference being that apart from tax interest effect, there will also be non-tax interest effect. The policy of showing incomes in progressive tax scale makes it necessary to take into account, apart from interest effect, also progression effect. The strategy choice must be preceded with the analysis of type and course of progression scale, reflecting the so-called "bumps" at the end of particular range, which is show in the figure below.

In implementing the policy of showing income with gradual progression, we should consider the same strategy which is optimal with proportional rates, but in each analyzed period we should take into account numerous (discounted) extreme rates. Taking managerial decisions, the taxpayer should first move income to the period with the lowest discounted tax rate and then to the period with the next lowest discounted tax rate, and so on. If the taxable income movements are realized not as a result of the means of interpretation of the actual state, but as a result of shaping the actual state, then the taxpayer must consider non-tax interest effect. The activity consists then in maximizing the difference between discounted (beneficial) tax effect and discounted (detrimental) tax effect.

Taxation also affects the profitability of a particular method or structure of financing the company. Due to the fact that particular forms of financing are treated differently as far as taxes are concerned, we should take into account tax effects of financial decisions we take. From the point of view of managerial decisions, income tax burden should reflect [Wołowiec and Żuk 2020, 253-75]:

- The method of taxing the remuneration of a partner in a capital partnership (it is more beneficial from the tax point of view to pay interests on a loan than the dividend). In case of a partner which is a capital partnership taxation is neutral for tax decisions, assuming that there are no limits due to "thin capitalization").
- The method of taxing the remuneration of a partner in a personal partnership. From the tax perspective it is more beneficial to pay remuneration in form of shares in profit instead of interest on loan. Financing from borrowed capital coming from a partner is disadvantageous for financing from own capital, as there is no legal possibility of deducting interest when establishing the income of a partner-lender (regardless of whether the partner is an individual or a legal entity).
- Income taxes affect company financial liquidity, which is evidenced in the comparison of the possibility of preserving continuity of financial liquidity by delaying in time tax payment, using principles of line and digressive depreciation.
- Essential elements of the policy of showing incomes are: tax rate effect, tax interest effect, non-tax interest effect and progression effect.
- Depending on the course of tax scale, it is desirable to implement two different strategies within the policy of showing incomes. When using the means of actual state interpretation, the goal may be to minimize discounted value of tax payments, while using the means of shaping the actual state, the goal is maximization of NPV after taxation.
- Analyzing progressive tax rates (continuous progression), it is important to seek equality of discounted extreme rates in all analyzed periods. With reference to proportional rates and graded progression, it is vital to compare discounted extreme rates in particular periods and to move incomes to the periods (or time ranges) with the lowest discounted extreme rates.
- Obviously, with graded progression (contrary to continuous progression), we might not have the optimal discounted extreme rate, and optimization criteria may not be applicable in form of leveling discounted extreme tax rates.
- Taking managerial decisions we should be aware that in income tax putting incomes forward to future years cannot always be optimal due to both progression effect in progressive scales and non-tax interest effect in proportional scales.

4. NON-RESIDENT TAXPAYER VS. INCOME REPORTING POLICY

Non-resident taxpayer and income reporting policy. When making managerial decisions, an important element is to evaluate the application of the methods presented to analyze the income reporting policy of non-resident taxpayers in European Union countries. If an individual is subject to unlimited tax liability in country A and, in addition, earns income in country B (country of residence) as well as country A (country of source), and the income earned in country B (according to the double tax treaty) is excluded from taxation in country A, with the effect of tax progression. The analysis assumptions cover a period of two tax years (Y1 and Y2). Income earned in country B (A1 x I + A2 x I) is subject to income tax, using the exclusion method in country A, and income earned in country A (B1 x I + B2 x I) is subject to income tax according to the rules applied in that country. The goal to be pursued by the taxpayer is to minimize the discounted value of tax payments over two tax years, by optimally distributing income (I) over its sources located in two countries (A and B) and over two periods:

 $I = I (Y1) + I (Y2) = (A1 + A2 + B1 + B2) \times I$

Optimization criterion: (1): discounted value of tax payments = Σ (PIT B + PIT A x 1 /(1 + r) = min. Assumptions: (1) (A1 + A2 + B1 + B2) = 1; (2) (A1, A2, B1, B2) 0; (3) invariability of tax rates and interest rate over the two years under consideration; (4) comparable rules for determining tax income in countries A and B; (5) full divisibility of tax income (I) between accounting periods and both countries; and (6) not taking into account other additions to income taxes in both countries (e.g., crisis, solidarity, church and other additions).

(1) Assuming a single accounting period and assuming that the exclusion method is not applicable to country A, then the total income should be divided between the income earned in country B and country A, and in a way that minimizes the amount of tax liability. Thus, the optimization criterion can be written: (2): PIT = PIT B [A1 I] + PIT A [B1 I] = min, assuming that (A1 + B1) = 1, that is: (2): PIT = PIT B [A1 I] + PIT A [(1 - A1) x I] = min. The share of income from sources located in country B should be increased (decreased) as long as the marginal tax rate attributable to income earned in country B is lower (higher) than the marginal tax rate applied to income earned in country A.

The tax wedge is the difference between the total cost of employing a person to work on the basis of an employment contract, contract of mandate or contract for specific work (including other types of contracts) and the salary that such a person receives in hand after paying tax and social security contributions. Otherwise, it is also defined as the sum of tributes paid by the employee and the employer under the employment contract. The amount of these charges is of great importance in terms of the volume of supply and demand for labour. Such burdens can be divided into three different types, including income taxes, social security contributions paid by employees and social security contributions paid by employees. All these burdens have an adverse effect on working people in the economy due to the increased expenses of hiring employees. The size of the tax wedge exists in close correlation with state expenditure on social benefits, as the fiscal burden of labour in the form of social contributions serves to finance the state's social transfers. High social expenditure implies a high tax wedge, which is particularly evident in the case of countries that are described as welfare states [Cienkowski and Wołowiec 2014].

CONCLUSIONS

Organizational effects of taxation can be analyzed in two aspects. Firstly, entrepreneurs must take organizational steps to ensure timely payment of tax obligations. They refer both to the activities related to one's own tax obligations (bookkeeping, making tax declarations or returns, supplying tax information) but also to the performance of the payer's functions related to transferring taxes collected at source. Secondly, we should take into consideration the fact that business decisions taken by entrepreneurs cause definite tax effects. Therefore taxes must be taken into account in management process, so we should create appropriate organizational conditions. The organizational problem can be solved in two ways: a) by establishing one's own tax department or; b) by using the services of an external tax advisor (tax *outsourcing*).

The above solutions are non-exclusive, as they can be combined. Obviously, the choice is preceded by the cost and benefit analysis. Especially in small and medium-sized businesses, it is not profitable to keep own bookkeeping and tax offices, as the costs of organization and maintenance exceed the fees paid to the external service provider. In case of bookkeeping and tax *outsourcing* the main reasons are usually cost reductions and access to expertise. Reduction of costs not only means lower expenses (usually it costs less to hire the accounting agency than to employ a full-time specialist), but also the reduction of costs of applying tax law. The entrepreneur does not feel uncertain and is released from the unpleasant duty of checking and interpreting the law on his own. The tax risk taken by the company also decreases. Tax risk can generally be understood as the risk of possible argument with tax organs. Depending on the attitude of a given enterprise, the risk can be pure or speculative. Pure risk brings only the possibility of incurring a loss, while speculative risk also offers the possibility of gaining some benefits. What is more, speculative risk is usually an outcome of a conscious decision – it is taken to gain something, the bigger the risk, the greater potential benefits. Thus intentional violating or dodging the law by the company means taking speculative risk. Pure risk, on the other hand, refers to entering into conflict with tax organs when: 1) the activity of a company was unlawful, but this unlawfulness was not intentional (a mistake, ignorance, etc.), 2) the activity of a company was lawful (usually it is determined by the court or possibly a higher instance tax organ), but it was not considered as such by tax organs, 3) the activity of a company was lawful and was considered as such for some time by tax organs, but they changed their opinion and the conflict arose.

Both these risks describe potential reality, that is the possibility of entering into conflict with tax organs. Their realization is random, and this is the case of the so-called double randomness – we do not know the time of the event (conflict) and its depth, that is effects. These effects are mainly financial (arrears, financial penalties, etc.) though the company may also lose its credibility. What is important, these two types of risk are related to uncertainty, each – its different kind. Speculative risk is associated with uncertainty whether unlawful activity will be revealed, while pure risk – with uncertainty which is an inherent part of the tax system. Risk differs from uncertainty in that it is measurable. The measurement of risk is done based on probability calculus and the variance of possible outcomes: gains and/or losses. In the case of speculative risk, to measure it one would use data on the detectability of fiscal crimes, however, taking into account only crimes actually committed intentionally.

REFERENCES

- Agnell, Jonas, and Mats Persson. 2000. "On the Analytics of the Dynamic Laffer Curve." *The Institute for International Economic Studies: Stockholm University* 682:1-13.
- Cienkowski, Mirosław, and Tomasz Wołowiec. 2014. "Market reactions of entities to income tax and managerial decision." Zeszyty Naukowe Uczelni Warszawskiej im. Marii Skłodowskiej-Curie 4(46):33-62.
- Feldstein, Martin, and Andrew Samwick. 1996. "The Transition Path in Provatizing Social Security." *NBER Working Paper Series* 5761:5-10.
- Fedir Zhuravka, Hanna Filatova, Petr Šuleř, et al. 2021. "State debt assessment and forecasting: time series analysis." *Investment Management and Financial Innovations* 18, no. 1:65-75.
- Gentry, Wiliam, and Glenn Hubbard. 2002. "The Effects of Progressive Income Taxation on Job Turnover." *Working Paper* 9226:1-43.
- Gruber, Jon, and Emanuel Saezl. 2000. "The Elasticity of Taxable Income: Evidence and Implications." *Working Paper* 7512:3-38.

- Gomułowicz, Andrzej, and Jerzy Małecki. 2011. *Podatki i prawo podatkowe*. Warszawa: Wolters Kluwer.
- Goolsbee, Austan. 1997. "What Happens When You Tax the Rich? Evidence from Executive Compensation." *Working Paper* 6333:1-35.
- Hundsdoerfer, Johen, and Marcin Jamroży. 1999. "Wpływ podatków na decyzje inwestycyjne przedsiębiorstwa." *Przegląd Podatkowy* 11:13-17.
- Kudert, Stephan, and Marcin Jamroży. 2007. *Optymalizacja podatkowania dochodów przedsiębiorców*. Warszawa: ABC Wolters Kluwer Business.
- Leibfritz, Willi, John Thornton, and Alexandra Bibbee. 1999. "Taxation and Economic Performance." *Economics Department Working Paper* 176:1-147.
- Mendoza, Enrique, Gian-Maria Milesi-Ferretti, and Patrick Asea. 1997. "On the Effectiveness of Tax Policy in Altering Long-run Growth: Harberger's Superneutrality Conjecture." *Journal of Public Economics* 66, no. 1:99-126.
- Myles, Garteth. 2000. "Taxation and Economic Growth." *Institute for Fiscal Studies and University of Exeter: Fiscal Studies* 21, no. 1:141-68.
- Sokołowski, Jerzy. 1995. Zarządzanie przez podatki. Warszawa: PWN.
- Wołowiec, Tomasz. 2009. "Relacje prawne i ekonomiczne pomiędzy podatkiem dochodowym od osób fizycznych i osób prawnych." In *Dylematy kształtowania struktury kapitału w przedsiębiorstwie*, edited by Janusz Ostaszewski, 85-293. Warszawa: SGH.
- Wołowiec, Tomasz. 2017a. "Ekonomiczne skutki opodatkowania podatkiem dochodowym podmiotów gospodarczych. Kilka uwag o reformie polskiego systemu podatkowego." In *Mechanizmy wspomagania sektora* MŚP, edited by Marian Stefański, 173-96. Lublin: Wyższa Szkoła Ekonomii i Innowacji.
- Wołowiec, Tomasz. 2017b. "Optymalizacja podatkowa w procesie zarządzania ryzykiem podatkowym (wybrane problemy menedżerskie)." *Roczniki Ekonomii i Zarządzania KUL* 4:29-45.
- Wołowiec, Tomasz. 2019. "Income taxation versus fiscal Policy (selected problems)." In Bezpieczeństwo prawne i bezpieczeństwo obrotu prawnego w Polsce, edited by Jan Mojak, Agnieszka Żywicka, and Leszek Bielecki, 237-47. Lublin: Innovatio Press.
- Wołowiec, Tomasz, and Krzysztof Żuk. 2020. "Bezpieczeństwo podatkowe państwa i organizacji (wybrane aspekty praktyczne na przykładzie wyłudzeń podatku VAT)." In *Kształtowanie bezpieczeństwa wewnętrznego w wymiarze administracyjno-prawnym jako zadanie wybranych podmiotów administracji publicznej i sektora prywatnego*, edited by Justyna Trubalska, and Łukasz Wojciechowski, 253-275. Lublin: Innovatio Press.
- Wołowiec, Tomasz, Tomasz Skica, and Gaja Gercheva. 2014. "Taxes and economic growth." *E-finanse* 3:52-64.