

ON TAXPAYERS' REACTIONS TO TAXATION AND ON TAX SHIFT

ROBERT GWIAZDOWSKI*

DOI: 10.26399/iusnovum.v13.2.2019.21/r.gwiazdowski

1. INTRODUCTION

Although indirect taxes (VAT and excise) are most important for the budgets of most European states, public discussion on taxation concentrates on income tax, corporate income tax (CIT) and personal income tax (PIT). The reason for that is the political significance of taxes, which concerns PIT in particular, because it is a burden for every voter in person. However, various taxes result in different consequences, which depends on various factors. As Henry Hazlitt noticed, "taxes inevitably influence the conduct of those on whom they are imposed."¹ There are not only, or not always, purely economic grounds for taxpayers' reactions. They are frequently psychologically conditioned. The taxpayer's assessment of his ability to carry the tax burden in the context of one's own economic situation is of key importance. According to Andrzej Gomułowicz, "due to economic and psychological conditions, there may be a phenomenon described in the doctrine and confirmed in tax practice as 'counter-reaction to fiscal pressure'".² The author also emphasises that both reasons, economic and psychological, are mutually conditioned: "taxation meets a psychological barrier when a tax burden causes that taxation effect is not obtained at the planned level".³

* PhD hab., Associate Professor, Department of Roman Law, Logic and Theory and History of Law, Faculty of Law and Administration of Lazarski University in Warsaw; e-mail: robert@gwiazdowski.pl; ORCID: 0000-0002-9789-9475

¹ H. Hazlitt, *Ekonomia w jednej lekcji*, Kraków 1993, p. 37.

² A. Gomułowicz, *Zasada sprawiedliwości podatkowej*, Warsaw 2001, p. 82.

³ *Ibid.*

2. TAXPAYERS' VARIOUS REACTIONS TO TAXATION

Six different reactions of taxpayers to taxation are described in science:

- 1) adjusting to tax, i.e. fulfilling tax obligations;
- 2) tax shift;
- 3) legal avoidance of tax;
- 4) tax compensation;
- 5) illegal tax evasion;
- 6) withdrawal from activities that are subject to taxation.⁴

According to Mirosław Pietrewicz, tax compensation consists in introducing "improvements in a company that lead to the reduction of costs or to the increase in production or sales so that the benefits obtained this way compensate the increase in tax burdens".⁵ Unfortunately, many politicians involved in the legislative process seem to share this opinion. They pass regulations as if they believed that the increase in taxes resulted in a tendency to work harder and longer in order to maintain the same level of net tax after additional taxation of their gross income. This belief is based on an assumption that taxpayers will accept the increase in taxes and will not undertake any counter-measures in such circumstances. However, even if taxpayers reacted in the way expected by politicians, their hard work would result in worse economic results, and in general a decrease in production. It is due to the fact that if a taxpayer, an entrepreneur, operates on the fringe of profitability from the point of view of the unit margin, the increase in tax rates makes him move to the grey market or give up doing business. Two hundred years ago Jean-Baptiste Say asked: "Can it be said that the necessity of paying tax makes the class of hard working people double their efforts, which results in the increase in production? First of all, it must be noticed that efforts alone will not be sufficient to produce; to do that it is necessary to have capital, and tax is what hampers saving that generates capital".⁶

No improvement of production will compensate the loss caused by the increase in tax rates. Taxpayers running small and medium-sized businesses calculate the amount of tax and not the amount of net profit. Moreover, their most common response to the increase in income tax rates is the increase in one's own margin. What is true is a statement that a tax shift is one of the most popular forms of taxpayers' reaction, which is developed later.

On the other hand, economic practice negates the statement that taxpayers react to the increase in taxation by reducing costs. The reduction of costs increases gross income that is subject to taxation. Thus, what is much more common is the opposite reaction: an increase in costs in order to decrease income. Hasty purchases are made, which have no sufficient economic justification and are based only on tax calculation. If there is a possibility of making tax saving investments, the inclination to incur such not really necessary expenditures is even stronger. In addition, non-

⁴ M. Pietrewicz, *Polityka fiskalna*, Warsaw 1993.

⁵ *Ibid.*, pp. 65–66.

⁶ J.-B. Say, *Traktat o ekonomii politycznej*, Warsaw 1960, p. 764.

investment activities are undertaken, which are purely accounting-related and are aimed at decreasing tax; thus, various strategies of tax optimisation are popular.

Having the choice between adjusting to tax by complying with tax obligations, which Mirosław Pietrewicz recognises as “the most common citizens’ response”,⁷ and trying to avoid or evade tax, taxpayers often decide to choose the latter solution. The assessment which reaction is more common may be carried out based on theoretical models of the nature of human behaviour and/or by empiric observation of them. Some time ago, Lionel Robbins stated that economics is a science that examines *human choices* concerning relationships between objectives and rare measures having alternative applications.⁸ Quoting those words, Tomasz Mickiewicz emphasises that economics understood that this way adopts a certain conception of man that is clearly distinguished from the world of nature determined by the rules of physics. Peoples’ originality against the background of atoms consists in the ability to make choices based on specific objectives they set on their own. And the choices are made in compliance with the principle of maximisation, which means that:

- i. a man strives to achieve an objective set with the use of the smallest input possible that is sufficient to achieve that objective, or
- ii. with the use of the given input, a man tries to maximise his objectives.⁹

Business activity aims to produce goods and services and to sell them in the most efficient way. Profit is the measure of this efficiency. Income taxes constitute the input necessary to affect gross income. To be able to sell and, as a result, obtain net profit, it is necessary to do business; and paying taxes that are obligatory in the country of operation is one of the requirements for doing it. Thus, it is possible to formulate a thesis that everyone will try to minimise this input. Taking into account that paying taxes evokes bad feelings, one cannot be surprised that taxpayers’ reactions aim to minimise tax burdens. Empiric observations of taxpayers’ conduct confirm this theoretical model. Most of them look for legal methods of tax avoidance. However, some of them try to apply illegal methods of tax evasion.

Legal tax avoidance means the use of legal regulations making it possible to decrease tax burdens thanks to various reductions, allowances or exemptions. What serves it is the concept of international tax planning based on differences in tax regulations in various countries and on differences in bilateral agreements on the avoidance of double taxation. It is also possible to make use of loopholes in the law: the more complicated the taxation system, the easier it is. And the more reductions, allowances and exemptions there are, the more complicated the system must be. Such *frater legem* activities are legal. According to Robert Hall and Alvin Rabushka,¹⁰ they consist in “making use of opportunities created by the law and giving preference to some type of expenses or investment. The problem consists in

⁷ M. Pietrewicz, *Polityka fiskalna...*, p. 64.

⁸ L. Robbins, *An Essay on the Nature and Significance of Economic Science*, London 1932, quotation after T. Mickiewicz, *Wybór w gospodarce*, Lublin 1996, p. 11.

⁹ T. Mickiewicz, *Wybór w gospodarce*, Lublin 1996, p. 12.

¹⁰ R.E. Hall, A. Rabushka, *Podatek liniowy*, Dom Wydawniczy ABC, Warsaw 1998, p. 50.

the fact that higher tax rates inspire investors to deal with the tax aspect of their undertakings rather than their economic usefulness".¹¹

It is expensive to avoid tax. Many finest minds in the field of law and accounting are continually working on how to optimise tax liabilities. Then they develop "products" that are to reduce tax obligations in the form of various tools and optimisation structures, they devote their time to sell them to interested taxpayers and, finally, they safeguard tax profits and protect them against revenue authorities. "It cannot be called a productive activity in the sense of creating whatever value for society. Their only aim is to help taxpayers to pay less tax. The real cost of that may amount to goods and services that those talented people would be able to provide if they did not devote their life to excavation of the tax system".¹²

However, taking steps *contra legem* is illegal. Tax evasion is "a polite word describing fraud".¹³ It should be shameful and discrediting. Unfortunately, the contemporary states' tax policy, which has more in common with expropriation than taxation, causes that tax evasion becomes the reason for pride and boasting. It is always so when society perceives the tax system as unjust. And this is how the Polish tax system is perceived, which is reflected in the size of the grey market and the number of detected tax offences committed by registered businesses.

This results in activities aimed at hiding income or increasing costs. Hiding income may consist in failure to reveal property that is subject to taxation, which most often takes place in case of inheritance, failure to issue invoices, which most often occurs in case of services provided by representatives of freelance professions, entering false invoices in the books, and transferring payments for fictitious services to the tax havens.

Globally, most of the unpaid taxes result from the submission of dishonest tax returns concerning legal activities. In general, fraud consists in underrating turnover, overrating costs or just failing to pay due tax. There are few instances of failing to submit any tax returns. In Poland, however, due to marginal significance of illegal sources of income such as trafficking in arms and drugs, a higher percentage of fraud does not only result from the submission of false tax returns but also from failure to submit them at all. There are also many more activities aimed at overrating costs.

The stronger the temptation to evade tax is, the higher the probability that many taxpayers will yield to the temptation. And the strength of it results from the level of tax system complexity and efficiency of fiscal control, i.e. the risk of being "caught" on the one hand, and the amount of profit expected, i.e. the obligation that someone tries to evade on the other hand. Thus, too high taxes encourage people to evade them. Almost 70 years ago, Roman Rybarski wrote that: "tax morale is inversely proportional to tax level; the higher the taxes, the lower the morale".¹⁴ Sometimes, as a result of the rise of taxes, the increase in "tax fraud"¹⁵ causes that tax becomes something illusory; the rise does not pay because people start to hide income. On

¹¹ *Ibid.*, p. 51.

¹² *Ibid.*

¹³ *Ibid.*

¹⁴ R. Rybarski, *Nauka skarbowości*, Warsaw 1935, p. 108.

¹⁵ *Ibid.*

the other hand, complicated tax regulations constitute perfect opportunities for people who will take the risk of escaping from taxation.

Taxpayers who do not want to act illegally may decide to give up doing business. "If an increased tax on electricity is imposed, everyone may respond to that starting to use lamp oil. If the prices of other consumption goods are raised, consumption may be eliminated".¹⁶ Today many taxpayers react in a similar way, which is reflected e.g. in drivers' growing interest in LPG installation in their cars after each rise of excise on petrol. Sometimes, the legislator introduces draconian taxes in order to achieve this objective as it most probably happened at the early 1990s in connection with import duty on cars, which was intended to encourage Fiat and General Motors to invest in Poland. More often, however, it also happens that taxpayers' reaction consisting in the limitation of production or consumption is not what the authorities have actually intended to achieve.

3. REASONS FOR TAXPAYERS' VARIOUS RESPONSE TO TAXATION

Taxpayers' reactions depend on their subjective perception of tax burdens, which is expressed as "a sum of taxes reducing a taxpayer's income, i.e. the difference between the income that would be in a taxpayer's disposal if he did not have to pay it"¹⁷ and real income that a taxpayer has after paying taxes. Both economic and political factors determine those taxpayers' reactions.

3.1. SUBJECTIVE STIMULI: POLITICAL AND PSYCHOLOGICAL

Taxpayers' feelings with regard to the way in which the state spends the money collected from them is a very important element that has impact on their behaviour. However, at the beginning of the century, after the first decade of the transformation, most Poles did not trust people responsible for public money management and believed that those spending public funds did not become rich in an honest way. Those who thought that public funds were spent for the benefit of all the citizens were clearly in the minority.

The research was conducted when the popularity of Leszek Miller's government reached its apogee just after the 2001 general election and voters hoped that the new government would put an end to the phenomena of corruption revealed during the last period of Jerzy Buzek's government. After successive financial scandals, when the trust to the new government fell dramatically, the number of taxpayers convinced that their taxes were defrauded shot up. The 2003 CBOS surveys showed that as many as 87% of Poles thought that politicians first of all cared for their own interests and 77% believed that politicians were not honest. The number of people who believed that politicians were idealists who wanted to do something good for the country fell to 6% from 22% reported in 1993. The number of people who stated

¹⁶ *Ibid.*, p. 109.

¹⁷ A. Gomulowicz, J. Małeczki, *Podatki i prawo podatkowe*, Poznań 1995, p. 111.

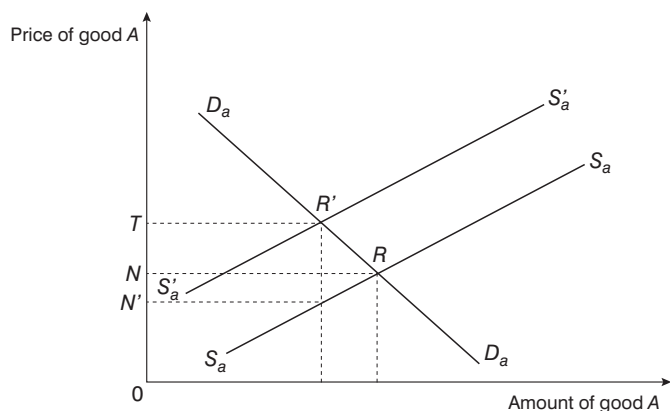
that politics attracted people because of money rose from 31% to 52%. 75% of the respondents believed that, regardless of political differences, politicians formed one organised clique.¹⁸ It is interesting what would be the findings of such a survey if we conducted it today. Taxpayers defend themselves against such a state with the use of every possible method. Thus, in such a situation, how can they be expected not to avoid or even evade taxes?

3.2. OBJECTIVE STIMULI: RELATED TO ECONOMICS AND ECONOMY

Taxpayers' reactions do not depend only on political assessment. Undoubtedly, they also depend on how taxes influence the development of (or changes in) demand and supply in a given market, on changes in particular markets,¹⁹ and finally on manufacturers, consumers and investors' decisions.²⁰

3.2.1. INFLUENCE OF TAXES ON PRICES AND DEMAND

In the economic sense, taxpayers' reactions are strictly connected with the state of the national economy and those of its sectors that affect a given tax burden to the biggest extent. Economic results of the imposition of taxes from the point of view of their influence on demand and supply concerning a particular good may be presented with the use of the coordinate axes as follows:²¹



Curve D_a represents the demand for good A , and curve S_a represents the supply of that good. The equilibrium between the demand for good A and its supply is at the point where the two curves cross, i.e. point R . In the equilibrium point R good A reaches the price equivalent to curve segment ON and this is the price for which

¹⁸ GW of 20 June 2003, *Zła gebla polityka*.

¹⁹ R.A. Musgrave, P.B. Musgrave, *Public Finance in Theory and Practice*, New York 1984, p. 268.

²⁰ S. Owskiak, *Finanse publiczne. Teoria i praktyka*, Warsaw 1997, p. 155.

²¹ *Ibid.*, p. 156.

a seller is willing to sell good *A*; on the other hand, a purchaser is willing to buy good *A* in the amount equivalent to curve segment *OC*. The equilibrium price for a seller is a net price without tax. If good *A* is burdened with a higher tax on selling equivalent to curve segment *NT*, the curve of demand will be raised up because the imposition of or increase in tax on good *A* will result in the rise in its price. The demand for good *A* will fall by the amount equivalent to curve segment *BC*. As a result of the imposition of or increase in tax, the gross price of good *A* rises, and its net price decreases, which is depicted by curve section *ON'*. In consequence, the demand for good *A* falls, thus, supply goes down, too. The equilibrium point moves to point *R'*.²²

The imposition of or increase in tax on a good results in the increase in the price that a purchaser must incur or in the seller's profit margin decrease. The proportion of a purchaser's and a seller's share of the price depends on economic factors such as demand and supply elasticity in relation to the price and a seller's ability to influence his costs. Demand elasticity means vulnerability of one amount (treated as a dependent variable – a reaction) to a change in another amount (treated as an independent variable – a stimulus). The amounts are supply and demand, which react to a price, or a price, which reacts to the changes in the supply-demand relationship. Theoretical market models distinguish price-related elasticity of supply (elasticity of supply in relation to a price) and price-related elasticity of demand (elasticity of demand in relation to a price).²³ The rate of elasticity is a measure of elasticity and it is the value which reflects the level of vulnerability of dependent variable *y* to changes in independent variable *x*. It determines the number of units by which value *y* changes if *x* changes by one unit.

In the mainstream theory of economics, demand is treated as a dependent variable. Independent variables include factors that shape demand: income, prices of given goods, and prices of substitute and complementary goods. Depending upon which factor has the stronger influence on the size of demand, one can distinguish its: (i) income-related elasticity, i.e. elasticity of the function of demand in relation to the level of income; (ii) price elasticity, i.e. elasticity of the function of demand in relation to the price of a given good; and (iii) mixed elasticity (also called cross elasticity), i.e. elasticity of the function of demand for good *A* in relation to the price of good *B*.

The dependence between consumers' income and the size of demand for a given good is most often unidirectional: when income rises and other factors remain unchanged, the demand for it rises and vice versa. That is why, the rate of income-related elasticity of demand, which informs about changes in demand expressed in percentages in cases of 1% changes in income, most often has positive values. Income-related elasticity of demand has different values not only depending upon consumers' income but also on the type of a good. In the economic theory, there are three basic categories of goods: inferior goods, necessary goods and superior goods. While income-related elasticity of demand is subjective in nature because it

²² *Ibid.*

²³ The inverse of those elasticity types is called price expansiveness and flexibility.

is correlated with entities generating market demand, price elasticity of demand is objective in nature because it is correlated with the object of exchange.²⁴

Price elasticity of demand measures the strength of the response of demand to changes in the price of a given good. It is a proportion of the percentage change in the size of demand to the percentage change in the price of a given good, provided that other variables do not change (*ceteris paribus*). Due to the response of demand to the change in price, one can distinguish:

- proportional demand (when the percentage change in price is exactly equivalent to the same percentage change in the size of demand in a reverse direction);
- elastic demand (when the percentage change in demand is higher than the percentage change in price);
- inelastic demand (when the percentage change in demand is lower than the percentage change in price);
- perfectly elastic demand (when demand may be of different size for a given price);
- perfectly inelastic demand (when the change in demand equals zero for any change in price).

Price elasticity of demand is determined by a few factors:

- the level at which a given good satisfies consumers' basic needs;
- the availability of substitutes for a given good;
- the share of expenses on the purchase of a given good in a consumer's budget;
- the level of the price of a given good;
- sometimes, consumers' adjustment to the change in price.

Price flexibility is the opposite of price elasticity of demand. The price flexibility rate shows by what percentage is necessary to change the price of a given good so that the demand for it can change by 1%. If elasticity of demand is perfectly inelastic, a purchaser will incur the whole burden of the tax imposed/raised. The size of supply and the net price of good *A* will not change. However, if elasticity of supply is perfectly inelastic, imposition of/increase in tax will not result in the change in the gross price for good *A*. On the other hand, its net price will fall down by the amount equivalent to the size of the tax imposed/raised. In such a case, a seller will incur the whole tax burden. If demand for good *A* were infinitely elastic, the imposition of/increase in tax, provided the gross price is unchanged, would result in the limitation of demand and the decrease in the net price because of inability to shift tax onto a purchaser. However, if the supply of good *A* were infinitely elastic, the imposition of/increase in tax would result in the limitation of supply, provided there is an increase in the gross price, until the equilibrium price determined by purchasers' readiness to pay a higher price is reached. Thus, the less elastic the demand and supply are, the smaller the influence of tax on a given

²⁴ The demand curve shows the basic relation between the price and demand. It demonstrates what amount of a given good consumers will buy in case of different price levels in a given period and on a given market. The demand curve has a negative slope: the higher the price of a given good, the smaller the amount the customers are eager to buy and vice versa. The demand principle formulated by Alfred Marshall illustrates that. The flatter (steeper) the curve of demand in a given point, the bigger (smaller) the absolute price elasticity of demand.

type of business activity is because the imposition of/increase in tax does not result in bigger changes in the allocation of resources. However, the bigger elasticity, the bigger influence of taxes on the allocation of resources.²⁵

Therefore, the interdependence of taxes and economic processes is obvious. Tax has influence on the price of a good taxed and, thus, on demand for it, which, on the other hand, has impact in its sales, *ergo* its production and supply. The law of demand and supply takes effect automatically. The market for each good is shaped by demand and supply, and its price. The increase in price as a result of tax imposed or increased must influence a market situation.

Various taxes have different consequences. Direct taxes produce different results than other indirect consumption taxes.

In case of increase in direct taxation rates on the part of consumers, there must be a decrease in consumption or savings because they have lower net income. On the part of sellers, we can observe a situation in which their net income after taxation will fall or will remain unchanged thanks to a rise in gross income. The increase in gross income may be obtained thanks to a price rise, i.e. a shift of the tax burden on consumers with a similar effect as in case of taxation of consumers. A price rise must lower consumption or savings. Roman Rybarski wrote: "taxes that cause the decrease in savings result in more damage than benefit because if a tax causes a decrease in capitalisation, it automatically causes an increase in interest rates since the supply of capital is insufficient".²⁶

4. TAX SHIFT

The phenomenon of tax shift is extremely significant. Almost a hundred years ago Adam Krzyżanowski wrote: "The study of tax shift looks for the answer to the question who in fact pays tax. The state burdens some categories of people. *Eo ipso*, it inspires taxpayers to try to reduce the tax burden".²⁷ "A taxpayer's direct reaction is an intention to raise the price of a good or service he or she sells at least by the amount of loss resulting from taxation".²⁸

However, in contemporary democratic societies, the fact of tax shift is not exposed; quite the opposite, it is hidden. Maybe, so that society will not demand the reduction of taxes. In a democracy, politicians who come to power convince the poorer majority that it is necessary to tax the richer minority. However, taking into account that all taxes can be shifted, one can say that the poorer who vote in favour of taxing the richer in fact vote for imposing taxes they themselves will have to pay. Realising that, the poorer majority would have to generally review their electoral preferences.

²⁵ *Ibid.*, pp. 155–158.

²⁶ R. Rybarski, *Nauka skarbowości...*, p. 111.

²⁷ *Ibid.*, p. 129.

²⁸ A. Krzyżanowski, *Nauka skarbowości*, Poznań 1923, p. 130.

The opinions about tax shift have been changing over the whole period of the development of the fiscal study.²⁹ In the 18th century, when fiscal study was not distinguished from economics, tax shift was seen through the prism of economic rules as a purely economic phenomenon. In the 19th century, when fiscal study was distinguished from economics as a separate study, there was a tendency to analyse the issue of tax shift from the purely fiscal point of view. Finally, in the third stage, at the turn of the 20th century, many theoreticians started to link the two aspects of tax shift. From the present perspective, a fourth epoch characterised by the lack of deepened reflection on tax shift may be added to the three epochs distinguished by Roman Rybarski.

4.1. ON TAX SHIFT IN CLASSICAL ECONOMICS

Physiocrats who were first to raise the issue of tax shift in a way that was deepened theoretically focused on its economic aspect. They emphasised that the imposition of tax on such social classes as land lessees, merchants or manufacturers affects the net income of land owners. It is due to the fact that all taxes are shifted by those who are to pay them onto the only class that is in disposal of net profit (*product net*), and only agricultural production generates such profit. They drew a conclusion that the best solution would be to introduce a single tax to be imposed on land owners because other "sterile classes" shift their own tax burden on that class.

Adam Smith believed that income may originate from land rent, capital gain or labour. Thus, every tax must be paid from one of the three sources. However, "many taxes are not eventually paid from the fund or source of income that was intended to be taxed".³⁰ According to Smith, taxes on land rent, residential tenancy rent, capital gains, remuneration for work as well as consumption goods are shifted. To tell the truth, land tax is paid by land lessees but in economic sense it burdens land owners. It is so because if the profit from agricultural production is constant, the land tax paid by a lessee inevitably results in the decrease of land rent a lessee pays to a land owner. Even if the profit from agricultural production increases, it occurs thanks to a lessee's resourcefulness. Therefore, it cannot be expected to cover the growing burden of land tax. Thus, as physiocrats believed, in practice land rent burdens land owners. On the other hand, residential tenancy rent in practice constitutes a gain from capital invested in construction. That is why, a construction investor, a building owner, does not cover the tax on that capital, i.e. rent, but shifts it on a tenant by including it in the lease price. Thus, the tax is financed from a tenant's income from one of the above-mentioned sources: land, capital or labour. In case of tax on investment capital gain, the price of raising this capital rises. This means that the method of shifting tax on capital gains depends, to some extent, on the allocation of capital. If it is invested in agriculture, the cost of its raising increased by the tax will reduce land rent, which will burden a land owner. If it is invested in industry or trade, the cost of raising it increased by the tax will result in the

²⁹ *Ibid.*, p. 117.

³⁰ A. Smith, *Badania nad naturą i przyczynami bogactwa narodów*, Vol. 2, Warsaw 1954, p. 584.

increase in prices of goods and will burden customers. On the other hand, labour tax always results in the increase in the price of workforce. Thus, first of all, the tax burdens an employer but he will try to shift this tax burden onto customers buying his products. Eventually, consumers bear payroll tax. A similar situation takes place in case of tax on consumer goods: this tax burdens customers. However, in case of taxation of basic necessities, tax shift is a bit more complicated. Due to the fact that the demand for labour and an average price of goods that labourers need to live regulate pay, every instance of increasing that average results in the necessity to raise pay so that a labourer can continue buying necessities he used to buy in the past provided that the demand for labour is not rising or falling at the same time.³¹ "This way", Smith concludes, "tax on basic necessities acts precisely in the same way as payroll tax".³² The situation with tax on luxuries is a bit different: the increase in their price does not cause the necessity to raise labourers' pay.³³

On the other hand, in his work *On the Principles of Political Economy and Taxation*, David Ricardo focuses on industrial activities and draws a bit different conclusions than Smith, who devotes more attention to land ownership. Ricardo states that tax on land rent does not burden a land owner because it can be shifted on the consumers of agricultural products. In his opinion, the increased price of those products raises the cost of labourers' maintenance, which inevitably must lead to their pay rise and, in consequence, to the entrepreneurs' profit fall. And it is them, not land owners, who bear real burden of potential rise in tax on agricultural products. However, Ricardo makes a reservation that not the whole tax is subject to shift as he writes: "if every merchant and every manufacturer raised prices by the amount of tax he has to pay, the process would never end".³⁴ It is hard to disagree with this observation. But it would be even more difficult to calculate to what extent taxes are shifted and what percentage of them is paid by taxpayers on whom they are directly imposed and by those onto whom they are shifted. However, it is also hard to disagree with the thesis that each taxpayer intends to shift as big part of tax as possible onto others.

Jean-Baptiste Say is also sure that the phenomenon of tax shift exists. He writes: "We would be mistaken if we thought that taxes definitely burden those who pay them."³⁵ Many of them are not actual taxpayers; for them, tax is an advance payment which they manage to recover, more or less as a whole, from the consumers of the products they produce".³⁶ He also emphasises that among all the manufacturers of the same product some may avoid tax consequences easier than others.³⁷ To a big extent, it depends on the nature of a taxed product and the location of a given taxpayer in the economic process. "Taxes burden those who cannot defend against them because they constitute a burden everyone wants to get rid of but the methods

³¹ *Ibid.*, p. 652.

³² *Ibid.*, p. 653.

³³ A. Gomułowicz, J. Małecki, *Podatki i prawo...*, pp. 22–29.

³⁴ Quotation after A. Gomułowicz, J. Małecki, *ibid.*, p. 31.

³⁵ J.-B. Say, *Traktat o ekonomii...*, p. 796.

³⁶ *Ibid.*, p. 796.

³⁷ *Ibid.*, p. 801.

of eliminating this burden infinitely differ depending on the types of tax and the function they play in society".³⁸ Consumption tax burdens every manufacturer proportionally to the share he has in the production of the taxed good. If tax on wine is introduced, vineyard owners will suffer. On the other hand, if very high tax is imposed on lace, farmers growing and selling flax will hardly notice that. But lace manufacturers and merchants will be very strongly affected.³⁹

There is also a difference between the consequences of taxing basic necessities and luxury goods. Tax imposed on basic necessities has impact on almost all other goods; thus, it is indirectly collected from the income of all consumers.⁴⁰ However, if the supply of products and demand for them do not remain the same, regardless of the imposition of or increase in tax on them, the prices do not change and a customer does not pay the smallest part of tax.⁴¹ The nature of land tax has been just like that for years. The amount of agricultural products remains unchanged, regardless of the tax imposed. Potential decrease in agricultural products has reduced the consumer population for centuries. Therefore, demand has also fallen and the relationship between supply and demand has quickly regained equilibrium.

4.2. ON TAX SHIFT IN THE POLISH ECONOMICS OF THE 20TH CENTURY

Physiocrats, Smith, Ricardo and Say focused on the economic aspects of tax shift. The German writers were first to state that the possibility of shifting tax depends on the nature of a given tax. In their opinion, some taxes, e.g. indirect taxes, can be shifted and others, e.g. income tax, land tax and capital gain tax cannot. Roman Rybarski criticises this approach. According to him, it cannot be assumed that a tax will be shifted due to its nature and another cannot. "The issue of tax shift does not depend on the nature of tax but on economic relations."⁴² Rybarski formulates a few rules concerning tax shift: shifting is easier in case of a monopoly and more difficult in case of free competition; it is easier in the period of prosperity and more difficult during the periods of recession when prices fall down and demand decreases; due to the tax nature, it is easier to shift indirect taxes when a certain economic act is taxed than direct taxes when income or property is subject to taxation. The possibility of shifting tax depends on its range: it is easier to shift taxes when their subject or object is limited and it is more difficult when taxes are more common; due to the technique of taxation, it is more difficult to shift a kind of special, fragmentary tax, e.g. inheritance tax: it is more difficult for a group of heirs inheriting buildings to shift inheritance tax on tenants than it is for all landlords to shift the residential rent tax.⁴³ On the other hand, according to Adam Krzyżanowski, the political system guaranteeing the freedom of competition, the material equivalent

³⁸ *Ibid.*, p. 804.

³⁹ *Ibid.*, p. 799.

⁴⁰ *Ibid.*, p. 800.

⁴¹ *Ibid.*, p. 802.

⁴² R. Rybarski, *Nauka skarbowości...*, p. 126.

⁴³ *Ibid.*, p. 127–134.

of which is economic ease of withdrawing labour and capital from a company and placing it in another one, makes tax shift easier. It is more probable and easier, in this author's opinion, to shift tax when its imposition and collection is close to the moment a product or service is sold and it decreases when the period lengthens. It is due to the fact that "the increase in the price of a product is more probable when the manufacturer pays the tax that he recognises as part of the production costs (...) The more distant the object of taxation is from the good that is to be more expensive because of taxation, the more difficult the shift, *ceteris paribus*, is".⁴⁴ The possibility of shifting tax also depends on the relationship between the potential rise in price and customers' income and the nature of goods that are subject to the price rise. If as a result of tax rise manufacturers increase the price of a product that does not constitute a big share in a customer's budget, the probability of accepting the price rise is higher. The situation is going to change in case of the increase in prices of goods that constitute a big share in a consumer's income. "He will suffer the consequences of the price rise for bread more than for needles", concludes Adam Krzyżanowski.⁴⁵ However, what plays a decisive role in the possibility of shifting tax is the structure of demand and the buyers' wealth rather than the nature of a good. The demand of hungry poor people is not going to cause the increase in prices for basic food products. On the other hand, the wealth of people who drink champagne makes it possible to push up its price.⁴⁶ The comparison of the price of a product and the wealth of a taxpayer alone does not make it possible to conclude that it is easier to shift tax imposed on cheaper goods or even relatively expensive ones that are relatively seldom bought. The rise in prices for the necessities will be perceived in a different way than "excise duty" products if the purchasers can maintain a financial margin necessary to meet the demand for them. It seems that tax shift is easier in case of necessities if the cost of their purchase does not constitute the majority of a consumer's spending and which, in such a situation, will be bought than in case of luxury goods from the purchase of which it is easier for a customer to refrain. It might seem that Adam Krzyżanowski recognised that issue intuitively when he compared bread with needles. His opinion on tax shift in the periods of prosperity and recession is totally different from Roman Rybarski's. While, according to Rybarski, the increase tendency makes tax shift easier because the rise in prices is more acceptable in the atmosphere of some kind of economic euphoria and it is less acceptable in the period of recession when consumers' income falls, according to Krzyżanowski it is quite the opposite. "Those who argue that the period of prosperity makes tax shift easier and a recession makes it more difficult (...) based on the principle of *post hoc, ergo propter hoc* (...) and do not ask a question whether the price rise would or would not take place in case of maintaining taxes unchanged present a contradiction in terms."⁴⁷ It is hard to unequivocally approve of one of the opinions. Looking at successive periods of economic boom and slump, one can draw a conclusion that tax shift depends on many factors and not just one.

⁴⁴ A. Krzyżanowski, *Nauka skarbowości...*, p. 136.

⁴⁵ *Ibid.*, p. 138.

⁴⁶ *Ibid.*, p. 149.

⁴⁷ *Ibid.*, p. 137.

Once tax shift is easier in the period of economic growth, on another occasion it is easier in the period of recession, depending on the level of monopoly, inflation and the level of increase or decrease. However, it must be stated that if all the other variables are the same, the prosperity period is more conducive to tax shift than the period of decline. An economic crisis is always connected with the fall in demand. The potential increase in prices resulting from additional taxation limits this demand even to a greater extent. On the other hand, Krzyżanowski is right to say that reproducibility of goods the price of which is to be raised is an important factor affecting the possibility of tax shift.⁴⁸ The rarer the goods, the bigger the chance of tax shift within the price. Krzyżanowski believes, however, that a buyer of a non-reproducible good, a very rare one, pays such a tax "out of the seller's pocket". It is hard to agree with this opinion completely. It would be true if a buyer had to pay some kind of property tax. If he offers the highest price for a good that is unique, establishing the price he takes into account the necessity to pay this tax and will not offer a price that together with the tax will exceed his purchasing power. Thus, he bargains to reach the price level that exceeds prices offered by other potential buyers at the lowest possible rate. However, in a situation when a seller pays income tax, this tax is for sure calculated in the price of the good for sale. The best example of that is a fiscal charge for purchase-sale agreements, which is most often incurred by a purchaser, not a seller, regardless of how unique the good in question is.

Krzyżanowski also disagrees with Rybarski's statement that a monopoly makes tax shift easier. "A monopoly only modifies the issue of tax shift with regard to goods that are cheaply reproduced",⁴⁹ the increase in production of which lowers a unit price thanks to the distribution of production costs to more units of the manufactured good. In case of goods expensively reproduced, the increase in production of which does not reduce overhead costs, there is no difference between the situation of a monopolist and of many manufacturers. Prices for such goods will always be close to the demand barrier. Manufacturers of such goods "are able to squeeze out of consumers the price that matches their total consumption ability also when there are many of them".⁵⁰ A monopoly results in such exorbitant prices that after a tax rise there is no space for another price rise in the market due to the demand barrier only in relation to goods expensively reproduced. In case of goods cheaply reproduced, a monopolist as well as members of a cartel creating such a monopoly must always take into account a potential appearance of competition that can originate from the too high prices of the goods produced and supplied. That is why, prices cannot be freely and endlessly raised. Therefore, not a monopoly or free competition is a decisive factor in tax shift but the decreasing or increasing cost of production of a bigger number of goods the price for which is to include shifted taxes. "In most general terms", writes Krzyżanowski, "a monopoly is a factor hampering tax shift, but the influence of reproducibility on this economic process is stronger".⁵¹ From the perspective of

⁴⁸ *Ibid.*, p. 138.

⁴⁹ *Ibid.*, p. 148.

⁵⁰ *Ibid.*, p. 147.

⁵¹ *Ibid.*, p. 148.

today's economic practice, it is hard to agree with this stance. Even in a situation when a monopoly exists, prices are never so high that they cannot be raised to a higher level. It can be exemplified by the increase in the price of fuel after every instance of excise rise, regardless of the dominant position of Polski Koncern Naftowy ORLEN on the Polish market of liquid fuel.

On the other hand, Krzyżanowski is right to state that “prices of reproducible goods are identical to the level of production costs of the most expensive manufacturer whose production is essential to satisfy demand”.⁵² As a result, potential tax shift onto purchasers of reproducible goods is possible only when the demand for given goods was not satisfied for the former price level. Otherwise, a price rise would inevitably lead to limitation of production and this would have to result in the fall of price, which would annihilate the former rise connected with tax shift. In such a situation, tax shift is most often delayed. Producers limit production, which causes that the equilibrium between supply and demand for a given good starts reaching a different, lower quantitative level, which makes it possible to raise the price for a given good. Therefore, there is tax shift but postponed, unfortunately with a simultaneous limitation of production. However, this happens only in case of reproduction of goods at growing costs, when the costs of the growth in production exceed the cost of the most expensive manufacturer so far. We deal with a different situation when the reproduction of goods takes place at falling costs, which means that the increase in production is accompanied by the fall in production costs and thus unit prices, as it happened with computers in the last decade of the twentieth century. In case the tax on this type of goods rises, the possibility of tax shift is much bigger. Customers benefited from the price fall, and that is why, they will be more eager to accept the price rise. On the other hand, in case of decreasing costs of production of a given good, a unit margin is usually already so small that there is no possibility that producers might incur higher tax burdens. If production were reduced as a result of increase in taxes, there would immediately occur a rise in prices for the products that formerly had been getting cheaper thanks to the increase in production. Thus, the price rise resulting from the reduction of production might prove to be higher than in case of tax shift. “The price of every good is established at the level adequate to the weakest consumer's demand and the weakest manufacturer's supply. Every price ensures consumer's rent for stronger consumers, those who would be ready to give more and a producer's rent for manufacturers who produce more cheaply”, concludes Krzyżanowski.⁵³ Every price ensures profits to the strongest consumers who are ready to pay more for a given good and the best manufacturers who produce that good most cheaply. In a situation when many consumers are ready to pay more for a given good, tax shift is relatively easy. In a situation when there are big differences in costs incurred by particular manufacturers, and manufacturers producing most cheaply have free production capacity or there is a possibility that a new producer having relatively low costs might enter a given market, tax shift is adequately more difficult.

⁵² *Ibid.*, p. 140.

⁵³ *Ibid.*, p. 145.

4.3. ON TAX SHIFT IN TODAY'S ECONOMIC REALITY

In the majority of cases theoreticians have analysed the possibility of shifting a particular tax so far. However, regardless of whether they burden property, income, turnover, labour or capital, taxes affect economic relations. In order to be able to pay whatever tax, understood as monetary contribution, it is necessary to have money. Every taxpayer obtaining some income from any source, after the introduction of or increase in some tax burdens, first of all tries to compensate his loss by increasing his income from the source from which its increase is the simplest to obtain. Most often, it is done by an increase in the price of what one has for sale: a product or service as well as a service in the form of labour, which means the payroll pressure. Whether it is possible to demand a higher price or a higher salary depends on the aforementioned relation between supply and demand for a good one has for sale. In the same way as there are no free meals, there are no taxes that might not be eventually paid by consumers of goods available on a given market.

Not only indirect taxes but also direct ones, including income tax as a leader, can be shifted. Indirect consumption taxes have impact on the gross price and burden consumers. On the other hand, direct income taxes imposed on sellers constitute their costs, and imposed on labourers may become those costs if employees can shift those taxes onto employers. In order to maintain profitability after a potential rise in taxes, sellers must raise net prices, which has the same impact on a gross price as a rise in indirect taxes.

According to Andrzej Gomułowicz, "while still not long ago the tax doctrine perceived tax shift as being exclusively connected with indirect taxation, at present it is hard to question the thesis that also burdens resulting from direct taxes are shifted".⁵⁴ A consumer in fact pays not only customs duty, import tariffs, VAT and excise, which affects the price for a product to the biggest extent, but also income tax imposed on a seller. That is why, there are attempts to increase income by increasing payroll or, in case of taxpayers who are entrepreneurs, a rise in their profit margin. A situation in which the remuneration of good employees who are in demand is expressed in a net amount is not an exception. This means that a gross amount is raised each time the remuneration exceeds a tax threshold. And an employee's remuneration constitutes an employer's cost. Therefore, he tries to compensate this type of rise in costs by raising income. "The key issue connected with taxation of productive powers, more precisely: with income from labour, is the question whether, in case of the imposition of income tax on employees' pay, they will force employers to pay them higher salaries, and whether they, on the other hand, are able to shift that increase in cost of labour onto product prices and eventually on a consumer", says Stanisław Owskiak.⁵⁵ In general, it depends on the level of elasticity of demand and supply of labour force and, in a particular case, on the attractiveness of a given employee.

⁵⁴ A. Gomułowicz, *Zasada sprawiedliwości...*, p. 21.

⁵⁵ S. Owskiak, *Finanse publiczne...*, p. 160.

The situation is similar in case of entrepreneurs who operate as sole traders. If a taxpayer obtains the revenue of "100" and incurs costs of "50", which gives him income of "50" that is taxed 10% and provides the net profit of "45", after the rise in a tax rate to 20%, he will first of all raise the price for his products or services in order to reach the revenue of "106.5", which will provide the same net income ("45") as before the rise in tax rates.

The price of a good that is taxed increases and, as a result of the demand and supply game, is somewhere between the price before the tax imposition and the value of "price plus tax". If a product that costs "100" is subject to a 10% tax rate, the price will not always reach "110", although it may sometimes happen. Sometimes, it can exceed "110" if a seller, due to the situation concerning demand, can use the imposition of or increase in tax to raise the price. However, the new price usually is somewhere between "100" and "110". Where exactly? It is not known in advance. A demand barrier may prevent the rise in price as a result of the increase in tax. Everything depends on demand elasticity. It may happen that demand will not react to the change in price (will be inelastic) and it may happen that prices before the change of taxation are so high that their rise will result in the decrease in demand. It is difficult to predict that but we can expect that the price of goods that are difficult to substitute for will rise. However, if the rise in price for goods that are easy to substitute for reaches the barrier of demand, the reduction of a seller's costs may be an alternative to tax shift. But it is the sellers' "second choice". If they cannot reduce the costs, they reduce their profit margin. However, they can reduce it to the level which exceeds satisfaction from free time or the costs of moving business to a different tax jurisdiction or the risk of moving to the grey market. In case of a business run on a small scale, mainly to earn a living, the first option (limiting business activities in favour of more free time) is not taken into account. But there is an inclination to take risk and to operate in the grey market. Thus, if a taxpayer meets the demand barrier, the increase in taxes also affects the state revenue, which the famous Laffer curve illustrates.⁵⁶

Tax shift can be partial or complete. The general economic situation in the country and the market position of a given taxpayer who tries to shift taxes are decisive factors in this area.

Mirosław Pietrewicz notes a possibility of shifting taxes "forwards or backwards" but he does not define the phenomena.⁵⁷ In order to understand his intention, we must refer to the earlier works by the authors who used those concepts.⁵⁸ A wholesaler in Rybarski's example may raise the price for retailers who will successively raise the price to be finally paid by a consumer and we deal with tax shift forwards, towards the end of an economic process. Krzyżanowski introduced the distinction between the first degree (direct) shift onto a consumer of products or services, and a further one when this purchaser shifts the consequences

⁵⁶ R. Gwiazdowski, *Krzywa Laffera. Rzecz o tym jak obniżki stawek podatkowych mogą skutkować zwiększeniem wpływów podatkowych i vice versa*, Przegląd Prawniczy No. 1, 2005.

⁵⁷ M. Pietrewicz, *Polityka fiskalna...*, p. 64.

⁵⁸ R. Rybarski, *Nauka skarbowości...*, p. 116.

of the raised price he had to pay onto the next group of buyers or final receivers.⁵⁹ A wholesaler may also demand that his suppliers, producers, increase the margin and then we deal with a tax shifted backwards towards the former stages of the economic process.⁶⁰ Based on this example one can state that it does not concern the "time" but "space" related shift. Taxes are shifted "sideways", onto another taxpayer, regardless of the time chain in the production and sale process he is in. In case of a new tax shifted forwards the final price rises, in case of tax shifted backwards, it does not change or can even fall, although it rarely happens. Indeed, it is a purely hypothetical possibility because in the era of common taxation of income and consumption the rise in taxes concerns a wholesaler and his suppliers to the same extent. Therefore, tax shift more often takes the direction towards a final consumer by an increase in the retail price. According to Witold Modzelewski, "the shift consists in the fact that with the use of the change in the level of prices, remuneration or other economic categories on which a taxpayer has or can have impact, he increases his income by the whole or part of the tax sum (...) The tax legislator has little possibility of limiting tax shift. It can be done, however, with the use of other instruments of financial laws, in particular by *legal limitations of the freedom to determine prices and legal regulation of payroll* and other costs of generating income" [emphasis added by R.G.].⁶¹ Indeed, income (not revenue) can be increased by cost reduction (including the cost of remuneration). However, it is not tax shift but tax compensation discussed by Pietrewicz. Due to the minimum remuneration and the requirement of terminating an employment contract in order to reduce pay, it is hard to imagine another legal solution concerning possible limitation of remuneration as a response to the increase in taxes. The legislator can limit tax shift with the use of price regulation. It is, however, a mechanism known and commonly applied in the socialist directive planning economy. In market economy, which is the topic of this analysis and taxes in socialism constitute a subject matter for a totally different work, the mechanism of price regulation can function as a certain break in the system but its common application is hard to imagine.

The most surprising fact is that at present the economists who study taxes totally or almost totally ignore the aspect of tax shift. And indeed, "economics is a science that studies human *choices* concerning relations between objectives and rare measures (input) that have alternative applications."⁶² The term "choices" used in the definition is of extraordinary importance. Man is not an atom that is subject to the rules of mechanics without his own participation. The originality of a human being against the background of the world of atoms, about which the authors of tax regulations sometimes forget, consists in making continual choices based on the objectives a man sets.⁶³ Tomasz Mickiewicz writes that "human activities are characterised by predicting and the possibility of responding to future, predictable

⁵⁹ A. Krzyżanowski, *Nauka skarbowości...*, p. 133.

⁶⁰ R. Rybarski, *Nauka skarbowości...*, p. 116.

⁶¹ W. Modzelewski, *Wstęp do nauki polskiego prawa podatkowego*, Instytut Studiów Podatkowych Modzelewski i Wspólnicy, Warsaw 1998, p. 21.

⁶² T. Mickiewicz, *Wybór w gospodarce...*, p. 11.

⁶³ *Ibid.*

activities of others".⁶⁴ The assumption that the participants of an exchange act rationally based on maximisation is a fundamental element of economic thinking. This means that having a set objective, a man will try to maximise input necessary to achieve it and having given input, he will try to maximise the effects of his activities. A man acting rationally in conformity with the principle of maximisation tries to minimise tax burdens that are part of the cost of his business operations. Therefore, it can be expected that he will try to use all legal possibilities of avoiding taxation and he will or will not undertake potential activities aimed at tax evasion, depending on the calculation of the potential profit and risk of this offence detection. If the potential profit is high because the tax rate is high and the risk is low because of inefficiency of the fiscal apparatus, we can expect that he will decide to act to reduce tax burdens, even in an illegal way.

"The narrowing of the possibility of developing a company resulting from a price rise introduced in order to shift tax is incalculable loss. If it did not occur, consumption would grow faster or it would decrease to a smaller extent. A price rise hampers the increase in demand. It reduces a manufacturer's profits. A price rise by the amount of tax compensates *damnum emergens* but not *lucrum cessans*. The term *shift* means a total rise by the amount of tax without the percentage loss in accordance with the principle: *De minimis non curatur*."⁶⁵ At the same time, "loss that entrepreneurs suffer in case of tax shift because of a negative influence of the price rise on sales, i.e. also on the size of production, are often ignored when the whole tax burden is considered. Its size accounts for amounts paid to fiscal authorities in the form of tax. The sums are a visible tax burden but there is an invisible and incalculable burden beside. Shifted taxes are a visible economic sacrifice of consumers and an invisible one of manufactures because taxes limit their opportunities to increase production."⁶⁶

If tax shift fails, its capitalisation takes place. The inheritance tax is its best example. Its imposition does not affect the price of particular assets composing the property that is subject to inheritance or the inheritance as a whole. An heir must pay inheritance tax using his own money or take a loan for this purpose. "In both cases, the amount of capital for the purpose of production is reduced", writes Krzyżanowski, "Economic values that formed capital in private hands moved to the State Treasury. They stopped being capital in the hands of public authorities. Authorities usually decide to use them for the purpose of consumption. We know that the state is not really capable of using goods in a productive way."⁶⁷

⁶⁴ *Ibid.*

⁶⁵ A. Krzyżanowski, *Nauka skarbowości...*, pp. 131–132.

⁶⁶ *Ibid.*, p. 132.

⁶⁷ *Ibid.*, p. 134.

4.4. TAX SHIFT EXEMPLIFIED BY NEW TAXATION SOLUTIONS IN POLAND

The phenomenon of tax shift may be observed in connection with the introduction of the "bank" tax⁶⁸ and attempts to introduce "retail" tax⁶⁹ in Poland in 2016. Although the retail tax has not been introduced because of the opinion of the European Commission, it is worth comparing the situation on both markets and refer the effects of the introduction of the tax on one of them to the other because the government announces that the "retail" tax will be introduced in a different form.

What banks' reactions could be observed after the introduction of the bank tax? Were they in the reason-cause relation with the introduction of the bank tax? Or was the correlation only a coincidence?

The Act on taxation of some financial institutions, commonly called the bank tax, entered into force on 1 February 2016. The new tax is imposed on banks, credit unions with over PLN 4 billion in assets, insurance and reinsurance companies with over PLN 2 billion in assets and credit firms with over PLN 0.2 billion in assets. The tax is property related. The institutions' assets, i.e. the surplus of the sum of their assets resulting from a trial balance for the last day of a month over the amount exempt from tax, are subject to the tax. In case of banks, it is mainly the present amount of mortgages and other loans for households, the present amount of investment loans and working capital loans for businesses as well as the present state of securities other than treasury bonds that are exempt from taxation. The tax rate is 0.0366%, and it is collected monthly, which makes the 0.44% rate annually.

The government planned that the new contribution would provide the state budget with PLN 5.5 billion and the officials from the Ministry of Finance assured that they could prevent tax shift onto banks' customers. PKO BP, which is controlled by the state, was to maintain former terms for deposits and loans and to exert pressure on other banks to refrain from the increase in margins. From the very beginning, the argument of the influence of competition seemed erroneous. In the conditions of general market equilibrium, there is an automatic mechanism maintaining a "justified" level of capital profitability, the same as that before the change in circumstances disturbing the equilibrium, which is the introduction of a new tax in this case. One could expect that mainly the customers of financial institutions would eventually become the taxpayers of the bank tax.

After a year, it can be noticed that the results of the introduction of the new contribution are lower than planned and that customers incur costs, as it should have been expected. Until the end of November 2016, the revenue from the bank tax was PLN 3.15 billion, which suggests the annual total of PLN 3.5 billion. This accounts for only 64% of the plan. The first month of the new tax regulation in force gave the budget PLN 304.8 million, however, in the months to follow banks paid less and less. This resulted from avoiding taxation with the application of

⁶⁸ Act of 15 January 2016 on taxation of some financial institutions, *Journal of Laws [Dz.U.] of 2016*, item 68.

⁶⁹ Act of 6 July 2016 on taxation of retail revenues, *Journal of Laws [Dz.U.] of 2016*, item 1155.

various legal solutions. One of the methods was the application of the so-called administration procedures. A bank that goes into administration is exempt from tax. Bank Ochrony Środowiska and Bank BPH used that solution at the very beginning. Getin Noble Bank did the same after the first quarter, which resulted in a considerable decrease in that tax revenues between March and April. Another method used was the purchase of treasury bonds, which banks could deduct from the tax base. Until the end of 2015, banks' interest in this form of assets was rather stable. From January 2016, it was possible to notice a dynamic increase in the share of this component of assets exempt from taxation. From January till the end of May 2016, banks' involvement in the purchase of treasury bonds rose by PLN 54 billion, i.e. by 33%. This was the main element that caused the reduction of their taxation base by PLN 57 billion. If banks had paid the tax in December 2015, the revenue of the state budget would have risen by PLN 20 billion in comparison with May 2016. Therefore, thanks to such shifts, in the first quarter of the new tax rate being in force, the effective bank tax rate was ca. 0.27%.

On the other hand, regardless of the introduction of the new tax, banks had higher net profits. In 2016 it reached PLN 13.91 billion, i.e. 24.3% more than the year before and similarly to the level in the record years of 2011–2014.⁷⁰ The budget also recorded revenue. So, who lost? Of course, the customers did.

Bank tax is not imposed on certain products or services but on the sum of assets, i.e. what makes a bank earn or lose (loans, bonds). Thus, the identification of its influence on the increase in prices for different products or services is difficult but, due to limited competition on the banking services market resulting from the high entry barrier, it could have been expected that such increase would occur. And, indeed, it did.

Over the whole 2016, the WIBOR index reflecting the price of money in trade between banks fluctuated around 1.7%. At the same time, the interest on deposits systematically fell. By the end of 2015, the average interest on the best yearly deposits was 2% and at the end of 2016, it was only 1.7%. Individuals have ca. PLN 660 billion deposited in banks. Part of the money is kept in savings accounts which pay no interest. However, almost PLN 300 billion constitute time deposits and the interest on them fell throughout the year, which let banks increase their interest margin. Therefore, as interest on deposits of PLN 300 billion fell by 0.3%, banks' savings reached a billion. Another PLN 100 billion is deposited in savings accounts that pay interest but this interest fell by ca. 0.4%. This generated PLN 400 million in banks' savings at the customers' expense. This means they "paid" PLN 1.4 billion worth of bank tax because this was the amount by which the interest on their deposits was reduced.

Another method that banks applied to cover the new tax was the increase in mortgage profit margins. After taxation of banks' assets, its profitability is the lowest and, that is why, the price of mortgage was raised. At the beginning of

⁷⁰ However, it should be remembered that the 2015 result was burdened with the cost of insolvency of a few SKOKs and SK Bank, and the 2016 result was affected by the sale of shares in Visa Europe to the American Visa.

2016, an average new mortgage margin was 1.7–2% (depending on a customer's own input). At the beginning of 2017, it was 2.1–2.3%. The increase by 0.3% means that banks lending PLN 40 billion annually for an average period of 25 years earn PLN 200 million annually (i.e. PLN 2 billion throughout the whole mortgage period). For a statistical customer taking a mortgage of PLN 300,000 this means the rise in costs by almost PLN 20,000.

These are aggregate data. From the point of view of consideration of tax shift a more detailed comparison is necessary. However, the analysis of prices of products and services on the financial market is not simple because those products and services are configured in a different way in various banks. In order to make it easier for customers to compare offers, an annual percentage rate of charge (APR) was created. According to the price comparison website of Bankier.pl,⁷¹ on 10 February 2016 the lowest APR in case of a mortgage of PLN 200,000 with PLN 50,000 of one's own input and the collateral value of PLN 250,000 was 3.58%, and the highest one was 4.79%. The difference accounts for 33.5%! But the requirements for granting a mortgage were varied. The higher APR, the easier it was to get a loan. Moreover, the lowest instalment was PLN 880, the highest one was PLN 1,000. Thus, the difference in an instalment accounted for 13.5%; the change was over two times lower than in case of APR.

The prices of other financial products and services also rose. One bank raised the charge for the increase in the revolving credit limit. In 2015 it charged 2.1–2.5%; in 2016 the rate reached 5%. It also introduced a charge for email calls for due payments. In 2016 the operation cost PLN 8. A new fee for valuation of real property to be a collateral was introduced to the new price list; it was priced from PLN 300 to 800. Also the fee for credit card use was raised from PLN 10 to 15 and the bank withdrew from the exemption from the charge in case of a certain amount of payments made. Moreover, the commission for revolving a credit in a current account rose from 2% to 2.5%, and a charge was introduced for internal currency transfer performed between corporate accounts from a foreign currency account. The charge was 0.35% of the amount transferred but not less than PLN 20. The maximum commission was PLN 200.

Another bank introduced a fee for using other banks' ATMs. In the past its customers could use all ATMs in the country free of charge. Since January 2016, only operations with the use of the bank's own ATMs and those of one network have been free of charge. In case of the use of other banks cash machines, only the first operation in a month is free, each successive operation costs PLN 2.5. The bank also raised the fee for using foreign ATMs. In 2015 such an operation cost 3%, and in February 2016 it rose to 6%. In addition, the bank introduced a 3% fee for foreign currency exchange calculation.

Still another bank introduced an account management fee of PLN 3 in March 2016. However, if a customer does not have a monthly inflow of PLN 3,500, the bank charges PLN 5 extra (in case of an inflow of over PLN 2,000) or PLN 12 (in case of an inflow below PLN 2,000). In addition, a new fee of PLN 3 was introduced for

⁷¹ www.bankier.pl/kredyty-hipoteczne/porownaj-oferty (accessed on 10/02/2016).

a foreign currency sub-account and PLN 10 for a savings account if a customer has no current account. Also charges for some money transfers were raised and a charge of PLN 1.5 for online transfers from corporate accounts was introduced.

New fees were also introduced for the use of debit cards. There was a change of terms of exemption from charges for some types of services: in order not to pay for a card, the customers of some banks must make a defined number of payments by card each month. Some banks also introduced charges for corporate accounts. Only customers into whose accounts a certain amount is paid each month are made exempt from the fee, provided that the transfer is not made from another account in the same bank.

Bank tax was to a great extent shifted onto banks' customers as it could have been predicted based on scientific literature on this matter. Would it have been the same with retail tax if it had entered into force? The situation in the retail sector is incomparable to the situation on the banking services market. There are over 300,000 shops and fewer than 30 well-established banks. However, the price differences in retail let us suppose that a potential rise in prices would not have met a demand barrier, thus they probably would not have been a natural consequence of the introduction of a new tax in accordance with the principle that the first response of the taxpayer is an attempt to shift the tax burden onto somebody else.

Social sciences ignore the practice of everyday life to a greater extent than exact sciences. However, in case of tax analysis, practical observation seems to be inevitable. We will not find many data in textbooks and spreadsheets. In a town that is located within a five-kilometre radius from Warsaw, there are four big supermarkets and 14 small shops. During the first week of February 2016, the same 150-gramme piece of light cottage cheese made by the same producer cost PLN 1.79 to 2.10 in 12 shops (including all the supermarkets). The most common price was PLN 1.99. But it was not available in all the shops. The average price in the shops having it in stock was PLN 1.99. The same type of 400-gramme kefir cost PLN 1.99 to 2.49. It was available in 10 shops. A few shops sold it for PLN 1.99 and PLN 2.35. The average price was PLN 2.32. The differences between the price of cheese accounted for 17.5% and the price of kefir 25%! What is interesting, in a shop where the cheese was the cheapest, the kefir was more expensive than in a few other shops. In the second week of February 2016, in the shop where the price of cheese was formerly the highest (PLN 2.10), it dropped to PLN 1.95, i.e. below the average level in the first week. The new price was not only for the new supply (a different "best before" date) but all cheese, including that supplied before. The shop that had the cheapest cheese in the first week did not have it in stock in the second week. In one shop the price increased by PLN 0.10 and in another shop it dropped by PLN 0.10. In some other shops the price remained unchanged. The situation with kefir was similar. Manoeuvring the price level in case of such ranges does not pose any problems.

A situation in a town in the north-east of Poland where there is no such competition as close to Warsaw looks completely different. In three shops there, the brand of cheese advertised on television was not in stock. The light version was not available, either. A 200-gramme packet of cottage cheese cost PLN 1.44 to

PLN 1.49. The possibility of “amortisation” of a new product by sellers would look totally different there than near Warsaw.

Thus, it can be assumed that the shift of tax burden onto customers to such an extent as occurred in case of banks would have been much more difficult. The regulatory impact assessment should take into account all these nuances. Unfortunately, the legislators treat the so-called RIA as necessary evil. As a result, the consequences of regulations are totally different from the expected ones or at least the declared ones.

5. CONCLUSIONS

Paraphrasing the title of a famous book by Richard Weaver *Ideas Have Consequences*, Krzysztof Dzierżawski states that “taxes have consequences”. Bad taxes have bad consequences. The best way to raise the tax revenue is to support economic growth, which can generate tax income without the need to increase tax rates. Another method is the improvement of the efficiency of the state’s activities; it results in a better assessment of the state by taxpayers, which reduces their inclination to tax evasion or avoidance and lowers the cost of the state functioning, thanks to which the same “revenue” of the state may mean higher “income”. The third method is to construct the tax system and particular taxes in the way that makes tax avoidance or evasion difficult or not profitable. From this point of view, indirect taxes are better. Although it is easier to shift them, taxpayers cannot find a method making it possible not to pay them. On the other hand, for those who in fact collect them and transfer to the budget (sellers), they are neutral. Those who de facto pay them (customers) pay less attention to taxes included in the price of goods than to direct taxes, especially if their opinion on the quality of the state’s activities is negative.

BIBLIOGRAPHY

- Gomułowicz A., *Przerzucalność podatku obrotowego w PRL*, Poznań, 1988.
- Gomułowicz A., *Zasada sprawiedliwości podatkowej*, Warsaw 2001.
- Gomułowicz A., Małecki J., *Podatki i prawo podatkowe*, Poznań 1995.
- Gwiazdowski R., *Krzywa Laffera. Rzecz o tym jak obniżki stawek podatkowych mogą skutkować zwiększeniem wpływów podatkowych i vice versa*, Przegląd Prawniczy No. 1, 2005.
- Hall R.E., Rabushka A., *Podatek liniowy*, Warsaw 1998.
- Hazlitt H., *Ekonomia w jednej lekcji*, Kraków 1993.
- Jaśkiewicz Z., *Przerzucalność podatków w polskim systemie podatkowym*, [in:] Z. Jaśkiewicz (ed.), *Studia podatkowe i budżetowe*, Toruń 1964.
- Krzyżanowski A., *Nauka skarbowości*, Poznań 1923.
- Łączkowski W., *Granice opodatkowania*, Acta Universitatis Lodziensis No. 54, 1992.
- Mickiewicz T., *Wybór w gospodarce*, Lublin 1996.
- Modzelewski W., *Wstęp do nauki polskiego prawa podatkowego*, Instytut Studiów Podatkowych Modzelewski i Wspólnicy, Warsaw 1998.
- Montesquie Ch., *O duchu praw*, Kęty 1997.

- Musgrave R.A., Musgrave P.B., *Public Finance in Theory and Practice*, New York 1984.
Owsiak S., *Finanse publiczne. Teoria i praktyka*, Warsaw 1997.
Pietrewicz M., *Polityka fiskalna*, Warsaw 1993.
Robbins L., *An Essay on the Nature and Significance of Economic Science*, London 1932.
Rybarski R., *Nauka skarbowości*, Warsaw 1935.
Say J.-B., *Traktat o ekonomii politycznej*, Warsaw 1960.
Smith A., *Badania nad naturą i przyczynami bogactwa narodów*, Warsaw 1954.
Zweig F., *Przerzucanie podatków*, Kraków 1923.

Legal regulations

- Act of 15 January 2016 on taxation of some financial institutions, Journal of Laws [Dz.U.] of 2016, item 68.
Act of 6 July 2016 on taxation of retail revenues, Journal of Laws [Dz.U.] of 2016, item 1155.

ON TAXPAYERS' REACTIONS TO TAXATION AND ON TAX SHIFT

Summary

Numerous governments' growing interest in extending the tax base can be observed. The article discusses the conditions determining taxpayers' attitudes and their reactions to taxation and the mechanisms of their most common conduct, i.e. tax shift. It takes into account the Polish scientists', Adam Krzyżanowski's and Roman Rybarski's, output in the area in the twenty-year interwar period, as well as the contemporary experience with some new types of tax, such as bank tax that was imposed on some financial institutions.

Keywords: elasticity of demand, tax limits, indirect tax, direct tax, tax progressiveness, tax shift, taxpayers' reactions, tax avoidance, tax evasion, tax rates

O REAKCJACH PODATNIKÓW NA OPODATKOWANIE I PRZERZUCALNOŚCI PODATKÓW

Streszczenie

Obserwujemy wzmożone zainteresowanie rządów wielu państw zwiększaniem bazy podatkowej. Niniejszy artykuł dotyczy uwarunkowań determinujących postawę podatników i ich reakcji na opodatkowanie oraz mechanizmów najpowszechniejszego ich zachowania, czyli przerzucania podatków. Uwzględniono dorobek nauki polskiej w tym obszarze w okresie XX-lecia międzywojennego, Adama Krzyżanowskiego i Romana Rybarskiego, a także współczesne doświadczenia z nowymi rodzajami podatków, jak podatek od niektórych instytucji finansowych, nazywany podatkiem bankowym.

Słowa kluczowe: elastyczność popytu, granice opodatkowania, podatki pośrednie, podatki bezpośrednie, progresja podatkowa, przerzucalność podatków, reakcje podatników, unikanie opodatkowania, uchylanie się od opodatkowania, stawki podatkowe

SOBRE REACCIONES DE SUJETOS OBLIGADOS A IMPUESTOS

Resumen

Somos testigos de interés incrementado de gobiernos de muchos países en aumentar la base tributaria. El presente artículo analiza condiciones que determinan la actitud de sujetos obligados y su reacción a impuestos y mecanismos de su comportamiento común – desde gravar el impuesto a terceros, teniendo en cuenta la ciencia polaca en este ámbito en el periodo entre guerras mundiales – Adam Krzyżanowski y Roman Rybarski, y también experiencias contemporáneas con nuevos tipos de impuestos – como impuesto de algunas instituciones financieras denominado el impuesto bancario.

Palabras claves: elasticidad de la demanda, límites de tributación, tributos indirectos, tributos directos, progresividad tributaria, gravar impuesto a terceros, reacciones de sujetos obligados, evasión fiscal, fraude fiscal, tasas tributarias

О РЕАКЦИЯХ НАЛОГОПЛАТЕЛЬЩИКОВ НА НАЛОГООБОЛОЖЕНИЕ И УКЛОНЕНИЯ ОТ НАЛОГОВ

Резюме

Наблюдается повышенный интерес правительств многих государств к увеличению налоговой базы. В данной статье рассматриваются детерминанты, определяющие позицию налогоплательщиков и их реакции на налогообложение, а также механизмы наиболее характерного для них поведения – уклонения от уплаты налогов. С этой целью в исследовании использованы достижения польской науки в данной области в межвоенный период, прежде всего труды Адама Кжижановского и Романа Рыбарского, а также современный опыт с новыми разновидностями налогов – такими, как налог на некоторые финансовые учреждения, называемый банковским налогом.

Ключевые слова: эластичность спроса, пределы налогообложения, косвенные налоги, прямые налоги, налоговая прогрессия, уклонение от уплаты налогов, реакции налогоплательщиков, налоговые ставки

REAKTION VON STEUERZÄHLERN AUF BESTEUERUNG UND STEUERABWÄLZUNGSMÖGLICHKEIT

Zusammenfassung

Man beobachtet ein erhöhtes Interesse von Regierungen zahlreicher Staaten bezüglich Erhöhung der Steuerbasis. Dieser Artikel handelt von Bedingtheiten, welche die Steuerzahlerhaltung und deren Reaktion auf Besteuerung, sowie auch von Mechanismen einer allgemein herrschenden Haltung der Steuerzahler – also der Steuerabwälzungsmöglichkeit unter Berücksichtigung des polnischen Wissenschaftsgutes auf diesem Gebiet in der Zwischenkriegszeit – von Adam Krzyżanowski und Roman Rybarski, sowie auch aus zeitgeschichtlichen Versuchen mit neuen Steuerarten – wie Steuern von gewissen Finanzinstitutionen, anders genannt die Banksteuer

Schlüsselwörter: Elastizität der Anfrage, Besteuerungsgrenzen, indirekte Steuern, direkte Steuern, Steuerprogression, Steuerabwälzungsmöglichkeit, Steuerzahlerreaktionen, Besteuerungsentzug, Steuersätze

SUR LES RÉACTIONS DES CONTRIBUABLES FACE À LA FISCALITÉ ET À L'ÉVASION FISCALE

Résumé

Nous constatons l'intérêt croissant de nombreux gouvernements pour l'augmentation de l'assiette fiscale. Cet article traite des déterminants de l'attitude des contribuables et de leur réaction à la fiscalité et aux mécanismes de leur comportement le plus courant, c'est-à-dire le transfert des impôts en tenant compte des réalisations de la science polonaise dans ce domaine pendant l'entre-deux-guerres (Adam Krzyżanowski et Roman Rybarski) et des expériences modernes avec de nouveaux types de taxes, comme une taxe sur certaines institutions financières, appelée taxe bancaire.

Mots-clés: flexibilité de la demande, limites d'imposition, impôts indirects, impôts directs, progression fiscale, transfert des impôts, réactions des contribuables, évasion fiscale, soustraction fiscale, taux d'imposition

SULLE REAZIONI DEI CONTRIBUENTI ALLA TASSAZIONE E ALLA TRASFERIBILITÀ FISCALE

Sintesi

Vi è un crescente interesse da parte dei governi di molti paesi ad aumentare le loro basi imponibili. Questo articolo riguarda le condizioni che determinano l'atteggiamento dei contribuenti e le loro reazioni alla tassazione e i meccanismi del loro comportamento più comune – ossia la trasferibilità fiscale, tenendo conto dei risultati della scienza polacca in questo settore nel periodo tra le due guerre – Adam Krzyżanowski e Roman Rybarski – così come le esperienze contemporanee con nuovi tipi di tasse – come la tassa su alcune istituzioni finanziarie, chiamata tassa bancaria.

Parole chiave: flessibilità della domanda, limiti fiscali, imposte indirette, imposte dirette, imposte dirette, progressione fiscale, trasferibilità fiscale, reazioni dei contribuenti, elusione fiscale, evasione fiscale, aliquote fiscali

Cytuj jako:

Gwiazdowski R., *On taxpayers' reactions to taxation and on tax shift [O reakcjach podatników na opodatkowanie i przezucalności podatków]*, „Ius Novum” 2019 (Vol. 13) nr 2, s. 166–193. DOI: 10.26399/iusnovum.v13.2.2019.21/r.gwiazdowski

Cite as:

Gwiazdowski, R. (2019) 'On taxpayers' reactions to taxation and on tax shift'. *Ius Novum* (Vol. 13) 2, 166–193. DOI: 10.26399/iusnovum.v13.2.2019.21/r.gwiazdowski