



JACEK ŁUKASIEWICZ

WSEI University in Lublin, Poland

ORCID iD: 0000-0002-9181-9403

JUSTYNA PACUŁA

School of Business – National-Louis
University in Nowy Sącz, Poland

ORCID iD: 0009-0003-0639-8347

PRZEMYSŁAW BOCHENEK

School of Business – National-Louis
University in Nowy Sącz, Poland

ORCID iD: 0009-0006-7884-3392

MARTA BOJARUNIEC

WSCE University of Applied Sciences
in Józefów, Poland

ORCID iD: 0009-0009-2573-6720

ECONOMIC PSYCHOLOGY AND THE EMOTIONAL PERCEPTION OF FISCAL ILLUSIONS

PSYCHOLOGIA EKONOMICZNA A POSTRZEGANIE EMOCJONALNE ILUZJI FISKALNYCH

ABSTRACT

Economic psychology is a discipline that deals with the mental mechanisms and processes underlying consumer and other economic behaviour of a fiscal illusionary nature, through specific perceptions of nominal and real values in taxed and financial processes (psychology of taxation, interest rates, or inflation). Economic psychology studies and evaluates how preferences, choices, decisions and other factors of a nature influence these behaviours. It also deals with the consequences of these decisions, paying particular attention to the satisfaction of needs. The taxpayer is operating in a specific tax environment, which must always be considered on four levels: normative, organisational, economic and psychological. Our sensory receptors are constantly gathering information from the political or legislative environment. However, how we interpret the received fiscal information affects our interactions with the world. Perception refers to the way in which sensory information is organised, interpreted and consciously experienced. Perception includes both bottom-up and top-down processing. Bottom-up processing refers to the fact that perception is built on the basis of sensory information. On the other hand, the interpretation of sensory information is influenced by our knowledge, experiences and thoughts. This is called top-down processing. Thus, a tax illusion (more widely, a fiscal illusion) is a situation in which a taxpayer, as a result of inaccurate information or ignorance, builds up a false picture for himself about the taxation process. Taxpayers' reactions to taxation are different in the presence of tax illusion and in the absence of tax illusion. Tax illusion is therefore a factor in taxpayers' reactions to taxation. The existence of tax illusions makes the taxpayer not behave like a rational *homo oeconomicus*. Taxpayers' reactions to taxation are different in the presence of tax illusion and in the absence of tax illusion.

STRESZCZENIE

Psychologia ekonomiczna jest dyscypliną, która zajmuje się mechanizmami i procesami psychicznymi leżącymi u podstaw zachowań konsumentkich i innych zachowań ekonomicznych o charakterze iluzji fiskalnych, poprzez specyficzne postrzeganie wartości nominalnych i realnych w procesach podatkowanych i finansowych (psychologia opodatkowania, stopy procentowe, czy inflacja). Psychologia ekonomiczna bada i ocenia, jaki wpływ na te zachowania mają preferencje, wybory, decyzje i inne czynniki o charakterze. Zajmuje się również konsekwencjami tychże decyzji, szczególną wagę przywiązując do kwestii zaspokojenia potrzeb. Podatnik funkcjonuje w konkretnym otoczeniu podatkowym, które zawsze należy rozpatrywać w czterech płaszczyznach: normatywnej, organizacyjnej, ekonomicznej oraz psychologicznej. Nasze receptory zmysłowe stale gromadzą informacje ze środowiska politycznego czy legislacyjnego. Jednak to, jak interpretujemy odebrane informacje

podatkowe, wpływa na nasze interakcje ze światem. Spostrzeganie (percepcja) odnosi się do sposobu, w jaki informacje zmysłowe są organizowane, interpretowane i świadomie doświadczane. Postrzeganie obejmuje przetwarzanie zarówno oddolne, jak i odgórne. Przetwarzanie oddolne (bottom-up processing) odnosi się do faktu, że percepcja budowana jest na bazie informacji zmysłowych. Z drugiej strony, na interpretację informacji zmysłowych wpływają nasza wiedza, doświadczenia i myśli. To nazywamy przetwarzaniem odgórnym (ang. top-down processing). Zatem iluzja podatkowa (szerzej fiskalna) to sytuacja, w której podatnik w wyniku nieprecyzyjnej informacji bądź niewiedzy buduje sobie fałszywy obraz na temat procesu nakładania podatków. Reakcje podatników na opodatkowanie są odmienne w sytuacji występowania iluzji podatkowej i w sytuacji braku iluzji podatkowej. Iluzja podatkowa jest zatem czynnikiem wpływającym na reakcje podatników na opodatkowanie. Istnienie iluzji podatkowych sprawia, że podatnik nie zachowuje się jak racjonalny homo oeconomicus.

KEYWORDS: economic psychology, behavioural psychology, emotional behaviour, tax perception, social justice, tax fairness, behavioural economics, fiscal illusions, Adams' theory of justice

SŁOWA KLUCZOWE: *psychologia ekonomiczna, psychologia behawioralna, postrzeganie emocjonalne, percepcja podatkowa, sprawiedliwość społeczna, sprawiedliwość podatkowa, ekonomia behawioralna, iluzje fiskalne, teoria sprawiedliwości Adamsa*

INTRODUCTION

Economic psychology is concerned with the study of consumer and economic mechanisms. It is a field that includes the empirical study of both behaviour and economic decisions. It also deals with the formulation of descriptive theories, i.e. theories that describe these behaviours and decisions. Economic psychology is therefore a field that combines elements of psychology and economics. Economic psychology is also defined as a science that is responsible for analysing both the circumstances of the emergence and the course of mental processes in humans. It also investigates the role of regulating people's relations with the world around them and the possibilities of creating human behaviour (Alm, Sanchez, deJuan, 1995).

Max Wertheimer published a paper in the early 20th century in which he described how people perceive movement in rapidly changing still images. It can be assumed that the perception of the tax system and tax changes involves more than a simple combination of sensory stimuli. This belief has led to a new movement in psychology known as Gestalt psychology (Rock & Palmer 1990). One of the principles of Gestalt is the figure-ground relationship). According to this principle, we tend to divide our perception of the tax system figure and background. The figure is the way we perceive tax rates as real rates, while the background is the background, the real (actual) rates. Our perception of tax rates can be significantly different, depending on what is perceived as figure and what is perceived as background (Peterson, 1999). Our ability to interpret sensory information is thought to depend on what we call the figure (actual changes in the level of tax burden) and what we call the background (nominal changes – illusory) (Peterson, Gibson, 1987; Vecera, O'Reilly, 1998).

When it comes to taxation or fiscal issue, perception is important, which we can call a complex system of processes leading to the formation of a subjective image of tax reality. The perception of the amount of taxation is the first stage of the processing of information that is perceived by the sense organs (visible rate) (Banks, Krajicek, 1991). Thanks to the phenomenon of the human mind, it is available to the human consciousness and can be perceived and described by it. Perceptual systems have undergone a long process of evolution; it is only in man that such a complex, particularly sensitive mechanism for detecting and reacting to the variety of stimuli arriving from the environment has emerged. Every human being has genetically programmed perceptual abilities at birth. However, these do not remain the same for the rest of his or her life. New situations, life experiences that are part of the learning process can lead to changes in these abilities, shaping them in specific ways. In modern psychology, there are two basic approaches in the analysis of the perceptual process. The first concerns the extraction of features of the tax system (Peterson, Gibson, 1994; Bednarik, 2013).

REASERCH METHODOLOGY

Research in the social sciences, is inspired by numerous and diverse needs. Therefore, we will reduce the existing needs to two main types, to which specific types of research correspond. The first is linked to needs of a theoretical or cognitive nature, i.e. it includes all those needs that are associated with the development of a particular science. The second is linked to the diverse needs of practice. Focusing attention on the aforementioned types of needs, we can indicate the corresponding types of research. Thus, based on this principle, we distinguish the following types of research: cognitive, sometimes called basic research, covering methodological problems, problems related to further generalisations of previous cognitive achievements, etc. problems that are important for the development of each science and for the needs of practice, related to the existing possibilities of applying the achievements of a given science, verifying in a fragmentary way the veracity of its findings and revealing new research problems. The results of cognitive research are new theorems or theories.

On the other hand, the results of research for practice are to determine whether, and to what extent, the existing theorems and theories are useful in solving specific problems that arise in the functioning of the lifelong learning system in Poland. In other words, they serve to make existing theses and theories more precise and to verify them in a fragmentary way. Of course, both types of research co-determine the development of any science, thus confirming the validity of the methodological postulate proclaiming the unity of theory and practice in the research process despite the differences between them.

The main objective of the thesis is to present the elements of perception of tax reality through the prism of fiscal illusion related to nominal and real rates of taxation, taking into account elements of behavioural psychology. Inductive methods include various types of analysis, expert opinion, statistical data and scientific documents used in social research. In addition, the paper makes use of two general research methods, i.e. analytical and synthetic methods, which are characterised by a particular approach to the study of reality. The research methods used in this study are: comparative analysis, functional analysis and the dynamic research method.

A PSYCHOLOGICAL APPROACH TO FISCAL ILLUSION

Illusion is an optical illusion, the sensation of seeing something that is not actually there. An illusion, a belief that has no basis in reality. Economic psychology uses the term 'fiscal illusion' as an element of fiscal illusions, i.e. the failure to separate nominal and real values. (Duszyński, Wołowiec, 2007). In economics, the phenomenon of fiscal illusion is well known, consisting of the failure to distinguish between changes in nominal quantities and changes in real quantities (money, interest rate, tax rate or inflation rate). James Buchanan introduced the concept of fiscal illusions into the study of public finance. According to him, fiscal illusions occur when an individual (taxpayer) perceives a given situation falsely as a result of insufficient knowledge (Buchanan, 1997). In his discussion, Buchanan analyses fiscal illusions, which relate to both the sphere of taxation (raising government revenue) and the sphere of government expenditure. We analyse a microeconomic problem: how the fiscal illusion affects the taxpayer's response to taxation (Buchanan, 1964; Wołowiec, 2016). We deliberately formulate the concept of tax illusions instead of fiscal illusions because it is a narrower concept than fiscal illusions, as it only concerns the sphere of tax imposition and not the imposition of taxes and public expenditures (Wołowiec, 2008). A fiscal illusion (including fiscal illusion) is a situation in which a taxpayer, as a result of inaccurate information or ignorance, builds up a false picture for himself or herself about the tax imposition process and the amount of real taxation (does not distinguish between the legislator's mechanisms of operating with real rather than nominal concepts (Wołowiec, Cienkowski, 2015). Fiscal (as well as fiscal) illusion can occur, for example, when there is a systematic misperception of fiscal parameters (Tovmo, Falch, 2002). Fiscal illusion can be either deliberately or unconsciously created (e.g. through inaccurate information or intentionally distorted information) by taxing entities or it can arise spontaneously (through low economic awareness in society). A tax illusion may also arise through the accumulation of historical changes in the tax system, so that the tax system becomes illegible to the average entrepreneur (historical shaping of the tax system) (Niesiobędzka, 2004).

In order to answer the question of whether tax illusions influence taxpayers' decisions, two extreme situations will be analysed:

I. The taxpayer builds up a false notion for himself on the issue of taxation and misinterprets the imposition of taxes in a distorted and erroneous manner (presence of a tax illusion).

II. The taxpayer has full knowledge of taxation and correctly interprets the imposition of taxes (absence of tax illusion).

In the presence of the tax illusion, the consumer purchasing the good does not realise that a significant part of its price is taxes. This is a common phenomenon in indirect taxation, where, according to the tax laws, the seller of the good is the taxpayer, but the economic burden of taxation is borne by the consumer, who is the last link in the chain of transactions. The consumer is unable to calculate how much of the price paid will remain in the hands of the seller after paying the various public duties arising from the transaction. For this reason, another illusion is created related to the consumer's misperception of how much the seller of the good actually earns (Bradley, 2004). The consumer may be wrongly convinced that the seller earns much more from the transaction than he actually does. In such a situation, the consumer falsely perceives not only the process of imposing the indirect tax itself and that it is the consumer himself who bears the economic burden of paying this tax, but also falsely estimates the price relationships that exist in the economy. This can breed frustration and irrational economic decision-making based on false premises based on the illusion of perceived real values in economic and social processes (Paternak – Malicka, 2013).

FISCAL ILLUSIONS AND PERCEPTIONS OF THE TAX BURDEN

Where there is a tax illusion, the consumer purchasing the good does not realise that a significant part of its price is taxes. This is a common phenomenon in indirect taxation, where, according to the tax laws, the seller of the good is the taxpayer, but the economic burden of taxation is borne by the consumer, who is the last link in the chain of transactions. The consumer is unable to calculate how much of the price paid will remain in the hands of the seller after paying the various public duties arising from the transaction ((Roskampt, 1963). For this reason, another illusion is created related to the consumer's misperception of how much the seller of the good actually earns. The consumer may be wrongly convinced that the seller earns much more from the transaction than he actually does. In such a situation, the consumer falsely perceives not only the process of imposing the indirect tax itself and that it is the consumer himself who bears the economic burden of paying this tax, but also falsely estimates the price relationships that exist in the economy (Buchanan, 1997). Theories of fiscal illusions refer to psychological phenomenon of illusion and were developed by Italian economists A. Puviani and M. Fasiani (Puviani, 1903; Fasiani, 1961). The essence of fiscal illusions consists in hiding taxation, level of real tax burden, differentiation of tax burden, etc.

Fiscal illusions may be evoked by (Wołowiec, 2009):

1. making irrational economic decisions due to the creation of further illusions related to the misestimation of price relations in the economy.
2. making irrational electoral decisions.
3. resentment towards certain groups of economic actors, e.g. resentment towards petrol station owners because the price of fuel is too high.
4. in the case of deliberate creation of tax illusions by legislators, among taxpayers who are aware of such a tax illusion may reactions such as: tax avoidance (the taxpayer is aware that the real tax rate is very high), tax shifting to other actors in the economy or even a 'tax revolt' (in highly democratic societies).
5. a tendency to think in nominal rather than real terms.

Taxpayers' reactions to taxation are different when there is a tax illusion and when there is no tax illusion. The tax illusion is therefore a factor influencing taxpayers' reactions to taxation. The existence of tax illusions of taxation makes the taxpayer not behave like a rational *homo oeconomicus* (Wołowiec, Cienkowski, 2015).

Fiscal easing is a technical term in public finance theory. In general, fiscal illusions are defined as the social tendency to underestimating the costs of public spending and overestimating the benefits of public programs to individuals. In the original sense of the term, used by its author Amilcare Puviani, it was defined as a the process of governments hiding the true *taxcosts* (taxcosts) of public expenditures incurred. Fiscal illusions are a consequence of the use of indirect taxes, more *invisible* to the taxpayer, as well as the use of inflationary phenomena to reduce the real value of tax breaks and exemptions, freezing tax thresholds, etc. Another form of such practices is hiding taxes under another name as, for example, a pension contribution. This is fostered by the phenomenon of passing the tax from the payer-taxpayer to the consumer, leading to so-called price-taxes, hidden in the prices paid prices. All this results in taxpayers-electors being unaware of both the both the real cost of public services and the size of their own tributes (Wołowiec, Bogacki, 2020).

Fiscal illusions concern such issues as who should pay taxes and how much, what should be taxed, as well as what the amount of spending and what it should be spent on. They do not constitute a system of interrelated notions. They are characterized by a lack of internal coherence, resulting from separate perceptions of each of the fragments of the system and separate formulation of their expectations from them. Fiscal illusions have their psychological, institutional and social conditions. Fiscal illusions are also sometimes rooted in prevailing ideologies, fashionable economic theories and political stereotypes. At are generally not confirmed by facts, and in extreme cases can lead to consequences opposite to those promised by them (Wołowiec, Soboń, 2016).

JUSTICE AND THE PERCEPTION OF FISCAL ILLUSIONS

Fiscal illusions minimize the taxpayer's resistance to taxation. Basing the tax system on multiple tax titles makes it difficult for him to observe its aggregate size. He loses control over the size of his contribution to the state. It turns out that we do not have indisputable, widely approved foundations, or what we consider stable is merely an illusion (Łuszczynski, 2020, s. 267). Other illusions, on the other hand, cause him to evaluate in plus the benefits he receives or may receive. The reason for their acceptance is the isolated perception of particular aspects of state financial policy. The evaluation of actions, phenomena or behavior in the sphere of public finance is done in a distorted perspective. This distortion occurs precisely where a good grasp of the balance sheet or recognition of cause-and-effect phenomena is particularly important (Wołowiec, 2006).

In the area of public revenue, fiscal illusions are primarily related to the following primarily related to the following circumstances public authorities blur or conceal the relationship between the amount of individual tax and quasi-tax burdens and the benefits accruing to the taxpayer using public services in the broadest sense; the tax system makes use of indirect taxes, hidden in the prices of goods and services, the existence of which the taxpayer may not be aware of or simply in a given situation does not connect an increase in public spending with an increase in taxes of this nature; the construction of taxes on goods and services causes a mistaken impression or misunderstanding of who really, from an economic point of view, bears the burden of the tax; the tax system's reliance on multiple tax titles and at different levels of the country's territorial distribution may foster the impression that the tax burden is less than when the burden is imposed on a single object of taxation and the effect of dividing the total payment into many smaller payments, paid at different times, works similarly. In practice, there is a tendency to misuse terminology and call taxes fees, public-legal contributions. The amount of such quasi-tax burdens can be no less than those called taxes by the legislature. In addition, politicians and public administration use emotions and social conflicts for fiscal purposes, e.g. negative emotions against a certain group to increase the tax paid by it or to deprive it of the title that allows it to be reduced (Gudamet, Molinier, 2000).

Perception of the real value of taxation. The anchoring effect is that taxpayers tend to rely on the first information received (the anchor) when making decisions. In the context of taxes, the anchor is the nominal amount seen by the buyer.

In philosophical terms, Aristotle distinguished between the concepts of justice distributive and compensatory. Distributive justice amounts to equal treatment of all subjects belonging to the same category, while compensatory justice is expressed in equal retribution of good for good, evil for evil, so that punishment corresponds to guilt and reward to merit. From Aristotle's definition, the concept of distributive justice, which amounts to equal treatment of taxpayers, can be applied to taxes. Equal treatment of taxpayers is one of the basic principles of taxation and an important criterion for evaluating the tax system. In the legal sense, justice means a feature of a decision in the process of applying the law, in the positivist view, justice is a decision that was made by a competent body in accordance with an established procedure. The search for fixed and objective criteria of justice is an aspiration characteristic of various schools of natural law invoking the value of justice, implements changes in the tax system, which are often its negation (Gomułowicz, 2001). In the doctrine, attempts to solve the problem of fair taxation have never been realised, due to the practical difficulty of reconciling the interest of the public good with the individual interest of taxpayers. The question therefore arises as to where the boundary of taxation should run, from the point of view of efficiency and fairness and the scale and scope of tax redistribution (vertical and horizontal) (Grządalski, 2004).

Tax justice is understood as a universal and equal burden on social groups, which can be made clear to individual citizens that the burden of maintaining the state's taxes is borne by all of them. And a fair distribution of the tax burden is one that takes into account the ability of the taxpayer to bear the burden. A distinction is made between horizontal and vertical tax fairness. The former occurs when entities in similar or identical situations are taxed in the same way. Vertical fairness in taxation, on the other hand, consists in the fact that better-off entities are burdened more than the less well-off entities. In practice, this is realized with progressive tax rates. (Gwiazdowski, 2001). Tax reliefs and tax rates, especially progressive rates, are also closely related to tax fairness. Assessments on the legitimacy of reliefs vary to the extreme. Some argue that they promote an adjustment of the fiscal burden and a fair adjustment of the amount of tax to the payment

situation of the person who pays it. Others see the concessions as a manifestation of discrimination against those who do not benefit from them. The difficulty is that the taxpayer to whom the relief is granted does not consider it an expression of preference, but a satisfaction of justice. Achieving tax justice is a difficult thing in two senses. First, there are no universal methods and ways to implement it. And second, the intentions of the legislature and tax administration are never received in the expected way by taxpayers, at least some of whom will feel that they are being treated unfairly (Lea, Webley, Tarby, 1987). It can be assumed that tax justice is realised through the universality and equality of taxation. The application of various tax preferences may be a consequence of taking into account tax equality viewed subjectively. Such equality requires that the different material, family or social situation of the taxpayer be recognised (Nojszewska, Rojek 2003).

TAX JUSTICE AND ADAMS' THEORY – ADAPTATION TO FISCAL ASPECTS

Equity theory refers to the general human ability to judge certain actions as just or unjust. It assumes that each of us possesses some intrinsic sense of justice and is able to intuitively distinguish between just and unjust actions. According to the theory, in the context of work, fairness is determined by the ratio of an employee's work effort to the reward he or she receives for it, compared to the gratification others receive for work requiring a similar effort. In other words, we consider it fair that people performing the same work effort receive the same reward. Instead, we have a sense of injustice if one of these people earns more even though he or she does no extra work. Adams noted that employees who have a sense of being paid fairly are more motivated to work than those who feel they are affected by injustice. This is because job satisfaction increases with a sense of fairness. In contrast, when a person feels injustice, tension, frustration and, finally, internal opposition arise. As a result, according to Adams' research, the unfairly treated employee modifies his or her actions so as to restore a sense of harmony between the work input and the reward for it, and thus regain the lost sense of fairness. In turn, unable to increase his or her pay (e.g. when the boss refuses to give

him or her a raise), the dissatisfied employee reduces his or her own effort, works less efficiently, works more slowly, etc. (Stiglitz, 2012; Tyler, 1997).

Adams' theory of justice is worth considering when organising work in a team or an entire workplace. It is important to ensure that employees feel that they are treated equally, that gender equality is respected in the company, and that there is not even the shadow of a suspicion of any discrimination. One way to do this is through pay transparency – the principle of universality prevails in some countries, e.g. Iceland. Another method, definitely more common in Poland, is partial disclosure of gratification for work – i.e. public awarding of prizes, public information on benefits and bonuses in the company (Young, 1990).

Every employer should learn from Adams' theory of fairness. Treating subordinates fairly is not only ethical, but also simply beneficial for the operation of the company. So how to put Adams' principle into practice and make subordinates feel that they are being treated fairly. Above all, it is also worth talking to employees and paying attention to signs of dissatisfaction, listening to their rationale. A complaining person is not necessarily a demanding employee! Sometimes the problem is also not that a person is deliberately left out of promotions or bonuses, but that there is a bad system for verifying actual contributions. Perhaps a person's work simply does not show up in the statistics, and so they are not rewarded in proportion to their contribution. Responsibilities should be allocated according to employees' qualifications and capabilities. However, this does not mean that the person we know is more capable will do something faster – they are to be saddled with tasks when their less experienced or slower colleagues in the same positions do not have much to do. In such a case, the more skilled employee should occupy a higher position and be rewarded proportionally. Feedback is also important in day-to-day work. Team leaders should let employees know that they are doing some activities well and that other tasks need improvement, etc. Periodic review meetings are a good idea. A proper employee motivation system is the basis of any well-functioning company. Dissatisfied subordinates mean high turnover, the need for recruitment, reduced quality of work and wasted time, money. On the other hand, a positive attitude to work among employees results in better team performance and contributes to the success of the entire company (Vecera, O'Reilly, Randall, 1998).

CONCLUSIONS

In modern democracies, there are numerous political and institutional factors that mean that the policies pursued by public authorities do not seek to maximise social utility. The main reason for this is the lack of a sense of private co-responsibility for the state of public finances on the part of individual citizens. At the same time, the asymmetry of information makes them insufficiently aware of the existence and role of long-term budget constraints. As a result, they build up a false perception of the possible democratic choices, i.e. they are subject to fiscal illusion. This results in permanent budget deficits that lead to rapid debt accumulation. These circumstances pose the greatest challenge to fiscal sustainability, which should be considered a public good conditioning sustainable socio-economic development and thus requiring special protection. This justifies the creation of institutional arrangements that would safeguard the interests of a country's citizens from the consequences of excessively loose fiscal policies. These solutions – which constitute a broad and internally diverse group – are collectively referred to as 'fiscal policy rules'. They are intended to restrain the tendency of politicians to increase public spending. The general assumption is that public authorities subject to the constraints of fiscal policy rules should implement reforms to improve public finances. In practice, it is possible to encounter actions to 'circumvent' these rules by deliberately creating fiscal illusions. In this respect, they have a rich catalogue of measures at their disposal. They are usually based on one-off measures or statistical manipulations that affect the results of the national accounts and can be regarded as forms of so-called creative accounting.

REFERENCES

- Alm, J., Sanchez, I., deJuan, A. (1995). Economic and noneconomic factors in the compliance, *Kyklos*, no 48, 3–18.
- Banks, W. P., Krajicek, D. (1991). Perception. [in:] M. R. Rosenzweig & L. Porter (Eds.), *Annual review of psychology*, Vol. 42, 305–33.
- Bradley, B. (2004). *The fair tax*. Pocet Books, New York, 190.
- Bednarik, R. (2013). *The psychology of human behaviour*, Nova Science Publisher, New York.
- Buchanan, J.M. (1964). *Public Debt, Cost Theory and the Fiscal Illusion*, [w:] *Public Debt and Futures Generations*, J.M. Ferguson (ed.), The University of North Carolina Press, Chapel Hill
- Buchanan, J.M. (1997). *Finanse publiczne w warunkach demokracji*, PWN, Warszawa.
- Duszyński, M., Wołowicz, T. (2007). Psychologiczne granice opodatkowania. [w:] *Psychologia kierowania: rywalizacja współdziałanie*, WSB-NLU, Nowy Sącz, 213-224.
- Fasiani, M. (1961). *Principii di scienza delle finanza*, t .I, wyd. 2, Turyn.
- Gary E. G., Peterson, P. (1987). Calcium and the aging nervous system, *Neurobiology of Aging*, Volume 8, Issue 4, 1987, 329-343.
- Gaudamet, P., Molinier, J. (2000). *Finanse publiczne*, PWE, Warszawa, 627.
- Gomułowicz, A. (2001). *Zasada sprawiedliwości podatkowej*, ABC, Warszawa.
- Grądalski, F. (2004). *Wstęp do teorii opodatkowania*, SGH, Warszawa, 173.
- Grądalski, F. (2006). *System podatkowy w świetle teorii optymalnego opodatkowania*, SGH, Warszawa, 266.
- Gwiazdowski, R. (2001). *Sprawiedliwość a efektywność opodatkowania. Pomędzy progresją a podatkiem liniowym*, Centrum Adama Smitha, Warszawa : Centrum Adama Smitha, 139.
- Lea, S., Webley, P., Tarby, R. (1987). *The individual in the Economy*, Oxford University Press, Oxford, 652.
- Łuszczynski, A. (2020). *Pomędzy sprawiedliwym prawem a sprawiedliwym społeczeństwem*. *Journal of Modern Science*, 44(1), 255-268. <https://doi.org/10.13166/jms/125599>
- Niesiołowska, M. (2004). *Podatki*. [w:] *Psychologia ekonomiczna* GWP, Gdańsk, 507-510.
- Nojszewska, E., Rojek, M. (2003). *Rozważania na temat konsekwencji wprowadzenia reformy podatkowej w Polsce – inwestycje z uwzględnieniem oszczędności oraz rynek pracy z uwzględnieniem kapitału ludzkiego*. [w:] *Kierunki reformy polskiego systemu podatkowego*, UMCS, Lublin, 149-153.
- Paternak-Malicka, M. (2013). *Mentalność i moralność podatkowa a reakcje gospodarstw domowych na obowiązek podatkowy*, *Modern Management Review*, vol. XVII, no 1. 13-18.
- Peterson, M. A. (1999). What's in a stage name? Comment on Vecera and O'Reilly, *Journal of Experimental Psychology: Human Perception and Performance*, 25(1), 276–286. <https://doi.org/10.1037/0096-1523.25.1.276>

- Peterson, M.A., Gibson, B.S. (1994). Object recognition contributions to figure-ground organization: Operations on outlines and subjective contours, *Perception & Psychophysics*, no 56, 551–564 (1994). <https://doi.org/10.3758/BF03206951>
- Puviani, A. (1897). *Teoria della illusione nelle entrate publiche*, Perugia.
- Roskampt, K. (1963). The Distribution of Tax Burden in a Rapidly Growing Economy, *National Tax Journal*, vol. 16, no. 16, 20-35.
- Rock, I. & Palmer, S. (1990). The legacy of gestalt psychology, *Scientific American*, 263 (6), 48-61.
- Stiglitz, J. (2012). *Ekonomia sektora publicznego*, PWE, Warszawa, 992.
- Tovmo P., Falch T. (2002). The flypaper effect and political strength, *Economics of Governance*, no. 3; 12-17.
- Tyler, T. R. (1997). The psychology of legitimacy: A relational perspective on voluntary deference to authorities, *Personality and Social Psychology Review*, no 1, 325–345.
- Vecera, Shaun, P., O'Reilly, Randall, C. (1998). Figure-ground organization and object recognition processes: An interactive account, *Journal of Experimental Psychology: Human Perception and Performance*, Vol 24(2), 441-462.
- Wołowiec, T. (2006). Proporcjonalne i progresywne opodatkowanie dochodów osób fizycznych. [w:] *Organizacje komercyjne i niekomercyjne wobec wzmożonej konkurencji oraz wzrastających wymagań konsumentów*, WSB-NLU, Nowy Sącz, 337– 451.
- Wołowiec, T. (2009). CSR – a marketing strategy or a responsible business? (selected issues), *Hoff Univeristy of Applied Sciences, Hoff*.
- Wołowiec, T., Soboń, J. (2016). Psychologiczne aspekty sprawiedliwości podatkowej, *Problemy Profesjologii*, no 1, 73–82.
- Wołowiec, T. Cienkowski, M. (2015). Podatek dochodowy a równość i sprawiedliwość opodatkowania, *Zeszyty Naukowe Uczelni Warszawskiej im. Marii Skłodowskiej-Curie*, nr 3, 61-85.
- Wołowiec, T. Cienkowski, M. (2015). Typy podatku dochodowego i jego ewolucja w systemach podatkowych, *Zeszyty Naukowe Uczelni Warszawskiej im. Marii Skłodowskiej-Curie*, Nr 2, 53-70.
- Wołowiec, T. (2016). Ways of personal income taxation harmonization process. *Wyższa Szkoła Ekonomii i Innowacji w Lublinie, Lublin*.
- Wołowiec, T., Bogacki, S. (2020). Opodatkowanie dochodów osobistych a zasada sprawiedliwości opodatkowania, *Biuletyn Stowarzyszenia Absolwentów i Przyjaciół Wydziału Prawa KUL*, t. XV, 17(10), 7-32.
- Young, P. (1990). Progressive Taxation and Equal Sacrifice, [in:] *The American Economic Review*, vol. 80, no. 3, 253-266.