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TAX EXPENDITURES AS AN EXAMPLE OF FISCAL ILLUSION

Summary

The identification and estimation of the extent of fiscal illusion in the public finance system seems necessary to ensure the transparency of government activity. A lack of transparency of all the operations using public funds decreases budget revenues, may adversely affect the balance of state budgets or even lead to increasing the fiscal burdens on all taxpayers. Furthermore, making expenditures outside the budget process is related to a lack of control, which is particularly important from the point of view of the efficiency and effectiveness of these expenditures. Tax expenditures, being an equivalent of direct public expenditures, serve as an example of this type of activity undertaken by the government. The lack of effective control of expenditures in this category may constitute an incentive to use these instruments in order to escape from conventional spending, which is considerably more transparent. Tax expenditures enable increasing expenses on public programs even when the government officially attempts to reduce them - all the more so that programs which have been accepted once do not require formal annual approval. In addition, the procedure of introducing them into the tax system is less complicated than in the case of direct expenditures. The study includes an analysis of the relationship between tax expenditures and direct public expenditures, using the example of the United States of America in the years 1999-2015. Data analysis has shown that the rate of growth of tax expenditures was considerably higher than in the case of direct public spending, thus creating the illusion that public finances are more stable than they are in reality.

Key words: fiscal illusion, tax expenditures, transparent fiscal policy

JEL Classification: H20, H30, H50, H61, H68

1. Introduction

In recent years economists have increasingly been paying attention to the fact that the classical understanding of public expenditure has become anachronistic because it does not take into account the contemporary forms of activity undertaken by the government [Further: Tanzi, Schuknecht, 2000; Schick, 2007]. The literature lays emphasis on the fact that the activity of public authorities in this domain goes far beyond the realization of traditional “real” flows of money, i.e. the transfer of public funds for particular beneficiaries, whereas the dominating concept of public expenditures is rather incomplete. Public expenditures that “elude” the budget process are defined as off-budget and backdoor expenditures. The common attribute of the expenditures is the fact that they are made by the back door, i.e. outside the budget procedure and usually without being taken into consideration in the budget acts.

There may be various reasons for making budget expenditures outside the budget and, generally, without control (at the same time they tend to be rather complex). The government, whose main objective is to guarantee success in subsequent elections, deliberately creates a “fiscal illusion”, both with regard to the sum of the expenditures and the budget spending. By creating the “fiscal illusion”, fiscal authorities attempt to “blur the relation between the total sum of the funds truly spent in order to acquire goods and public services” [Wajda-Lichy, 2006, p. 86] and public spending. In the case of such activities, the government additionally creates the false illusion that public expenditures are lower than they are in reality and for this reason it is easier to maintain the illusive fiscal discipline. On the one hand, the government may cut expenditures in an ostensible way and step towards reducing the budget deficit. On the other hand, without additional procedures the government may introduce new public expenditures outside the budget and, consequently, without any special control of the Parliament. Tax expenditures (TEs) are among typical budget expenditures introduced “by the back door” and formed as the consequence of using tax constructions in special acts.

The aim of the paper is to analyze the dependence between tax expenditures and direct public spending. The conducted study enabled the verification of the following hypothesis: an increase in the indirect form of financing public expenditures while using tax expenditures causes a reduction in the public revenues, increase in the total public spending, and fiscal illusion. The analysis made use of the descriptive method and the statistical analysis method. In order to assess the statistical relationship between tax expenditures and direct public expenditures data from the budget acts of the United States of America were used as examples. The analysis comprises the years 1999-2015.

2. Fiscal illusion – the theoretical bases of analyzing the phenomenon

The phenomenon of fiscal illusion has been analyzed for more than a century, but interest in this subject considerably increased in the years 1960s-1970s. The concept of fiscal illusion is related to the wrong perception of fiscal burdens or the amount of tax that is paid. From the positive perspective, a fiscal illusion means that taxpayers

consider fiscal burdens to be lower than they are in reality. On the other hand, from the negative perspective, taxpayers believe that these burdens are larger than they actually are [Määttä, 2006, p. 6].

Generally, fiscal illusion means that certain sources of public revenue are either not noticed or not fully observed by citizens. If money from such sources is spent, some or all of the citizens reap benefits from them, thus supporting “the increasing size of the government”. Those taxpayers that are unaware of the sources of financing the expenditures do not sense “the pain” related to paying higher taxes or resign from tax cuts as they prefer increased public spending. Thus, from the perspective of taxpayers the financing of public expenditures from “the revenues” that are hidden owing to the generated fiscal illusion ought to enhance the popularity of the government. For this reason, governments seeking “reelection” find a real incentive to spend revenues, even the “lost” revenues that contribute to the formation of a fiscal illusion, and seek such revenues [Mueller, 2003, p. 221].

It is usually believed that the existence of a fiscal illusion means that voters constantly underestimate the costs of government operations [Fischel 1995, p. 206]. This ensues from the occurrence of information asymmetry. The analysts of this phenomenon believe that support for governments would drastically decrease if voters were in possession of complete information, e.g. about the costs of providing public services [Baekgaard, Serritzlew, Blom-Hansen, 2016, p. 26]. It needs emphasizing that, as was suggested by Anthony Dawns, the incentives to obtain information about the costs and benefits of implementing government programs are considerably lower than in the case of various private initiatives. The taxpayer who has one vote in an election does not have many reasons for investing considerable resources in order to analyse the costs and benefits related to the implementation of particular government programs [Oates, 1988, p. 66].

A considerable contribution to the analysis of the phenomenon of fiscal illusion was made at the turn of the 19th and 20th century by the Italian scientist Amilcare Puviani in his book *Teoria della illusione finanziaria*. Puviani’s approach was based on the assumption that the state/authorities, having a monopoly for governing, is/are capable of imposing their will on the citizens. Therefore, the fiscal structure appears to be the instrument that is used by politicians in order to collect revenue from the subordinate groups (of voters/taxpayers). The accumulated revenues are earmarked for financing public goods desired by the citizens [Buchanan, 1967].

The starting point for Puviani’s deliberations is the question of how the government ought to organize the fiscal system in order to minimize the reluctance of taxpayers in relation to the tax burdens. The answer to this question takes the form of a general hypothesis – if it is possible, the authorities attempt to create a fiscal illusion showing that the tax burdens are lower than they actually are. Additionally, they create another type of illusion – when the governed groups believe that the value of public goods and services that are available to them is lower than it really is. As J. Buchanan remarks, Puviani offers the verification of these hypotheses by analyzing the structures of the existing fiscal systems [Buchanan, 1967].

According to Wallace E. Oates, after the times of Puviani and other Italian economists, it was J. Buchanan's publication from the 1960s that provided an impetus to research regarding fiscal illusion [Oates, 1988]. Buchanan [1960, 1967] undertook studies into fiscal illusion in contemporary tax systems. While conducting his research Buchanan observed that for a taxpayer it is less burdensome to have part of his income reduced (on account of the necessity to pay the tax) when his employer performs the role of a tax collector and the employee does not directly receive the total amount of the remuneration that is subject to tax. In the case of social security contributions, it is a taxpayer who accepts regular increases in the contributions (also those imposed on employers), believing that they will be accumulated with the purpose of keeping an appropriate level of pension in the future [Buchanan, 1967].

In the 1970s, Richard E. Wagner conducted conceptual and empirical research on the notion of fiscal illusion in the publication *Revenue structure, fiscal illusion and budgetary choice* [1976]. The author stressed that the institutional way of organizing tax payments by citizens may have an impact on the way in which the actual cost of government " is perceived and thus on the dimension of the public sector [Wagner, 1976, pp. 46-47]. According to Oates, five forms/sources of fiscal illusion can be distinguished [Oates, 1988]:

- complexity of the tax structure, where the wrong perception of the tax system results from the fragmentation of the revenue system,
- income flexibility of the tax structure, where increased budget revenues are related to the flexible forms of revenue taxation,
- the flypaper effect, where the system has a stimulating effect on public spending,
- renter illusion, where the illusion concerns tax on real estate, which depends on the extent of the estate's ownership in a given jurisdiction,
- public debt illusion, when the awareness of the dimensions of public expenditures depends more on the awareness of the current taxation than on the costs of public debt financing.

Oates' viewpoint is shared by many authors, including, among others, Brian Dollery and Andrew Worthington [1996], Roberto Dell'Anno and Brian Dollery [2014].

Taking into consideration the state of the research on the phenomenon of fiscal illusion, it needs to be stated that the hypothesis regarding the complexity of the tax system is most frequently verified in an empirical way [Brogan, 2014]. This appears to be obvious since the revenue side is easier to analyse. This opinion is shared by many economists. The main difficulty in analyzing the hypotheses related to fiscal illusion arises from the fact that they are mere assumptions. Michael J. Brogan [2014] observed that it is very difficult to verify, theoretically and empirically, the hypotheses of fiscal illusion because the analysis requires the fulfillment of certain requirements. In empirical terms, among the most recent publications the attention of scientists ought to be drawn to Paulo Mourão's papers exploring the idea of a fiscal illusion index [Mourão, 2008, 2013].

Empirical analyses of fiscal illusion have so far been concerned solely with fiscal revenue balance and do not take into consideration the benefits ensuing from the operation of the public sector. This asymmetry does not necessarily reflect the increasing

importance of government expenditures in comparison with revenues [Dollery, Worthington, 1996, p. 2].

To sum up, Sergio Tenreiro de Magalhaes, Hamid Jahankhani and Ali G. Hessami [2010] have observed that even in the 21st century voters do not pay much attention to public accounts, which makes them susceptible to fiscal illusion. Thus, it seems that this phenomenon is worth investigating, both theoretically and empirically, to verify the various hypotheses of fiscal illusion.

3. Tax expenditures as indirect public expenditures

In order to achieve the objectives of the fiscal policies they adopt governments may make use of two basic groups of instruments: revenues and public spending. Undoubtedly, public revenues are the primary instruments which determine the size of the expenditures. The scope and type of instruments used for the achievement of certain objectives is dependent on many premises, economic and political, as well as social, systemic or historical ones.

The usage of public funds by the state (collection and spending) ought to be subject to strict regimes of effectiveness and openness, which, in the theory of public finances, are associated with the transparency of fiscal policy [Kopits, Craig 1998, p. 1]. Its essence lies in public information regarding the government's structure and function, the intention of fiscal policy, public sector accounts as well as their projection. The state's fiscal activity ought to be transparent and thus the entire process of obtaining and spending public funds ought to be transparent and familiar to society.

Unfortunately, this is not always the case. In the public finance system, there are many operations whose construction and legal framework let them elude official reports. Thus, they do not comply with the principles of public transparency of fiscal policy and may be regarded as a fiscal illusion.

In the theory of public finances, authors use two terms for these categories, i.e. the aforementioned off-budget financial operations and back-door financial operations [Dziemianowicz, 2014, p. 250]. The former involve governmental activity related to using various types of special transactions concluded by public companies through offering credits or government guarantees. Owing to their special features, such types of operations are not subject to budget approval [Kraan, 2004, p. 124]. The latter category, back-door operations, is connected with aid implemented (financed) through the tax system or other fiscal burdens. They are legally authorized, but remain outside the budget process, which violates the principle of unity. In this aspect, the main categories are: the specification of the way in which public revenues are used by particular sectors, programs, or specific categories of expenditures (earmarking of revenues), expenditure rules, which involves the obligation to spend certain amounts (in relation to GDP) of the entire budget on particular sectors (education, health, social security), or specific categories of expenditures and such constructions as tax expenditures [Jul, 2006, p. 18].

Thus, one may assume that all the operations included in the above two groups of instruments are fiscal illusions because they remain unrecorded and absent from budget

reporting, as a result of which society knows little about them and may believe that the government's scope of operation is accurately reflected by the figures presented in the official budget.

One of the public categories included into the back-door group of categories that is not fully consistent with the principle of transparency is the construction referred to as tax expenditures. On the one hand, the usage of such elements of tax construction, in a way, remains outside social control, thus becoming a fiscal illusion.

Using the definition adopted for the needs of OECD documents, one ought to regard TEs as various types of preferences in the tax law, regulations or practices that reduce or postpone the obtaining of income in relation to standard regulations for a relatively small group of taxpayers. From the point of view of the government, these are lost tax revenues, while for taxpayers they mean a reduction of tax burdens [*Tax Expenditures in OECD Countries*, 2010, p. 12]. These constructions take the form of tax exemptions or carve-outs, tax reliefs, deferrals, reductions or tax credits. The definition of TEs adopted by The International Budget Partnership (IBP) in an attempt to promote open, participatory and responsible public budgets emphasises the substitutional character of TEs in relation to direct public expenditures. Hence, the term denotes instruments used instead of direct expenditures in order to provide government subsidies to certain groups of taxpayers or to encourage them to undertake certain activities [IBP, p. 4].

Therefore, TEs were treated as substitutes of direct expenditures. What can serve as an additional argument in favor of such an approach is one of the methods of estimating the value of TEs, which is defined as the outlay equivalent method [Further: Wyszowski, 2015, p. 45]. It directly acknowledges that the value of a TE is the equivalent of the sum of a direct budget expenditure that would accomplish the same objective.

Additionally, the very name chosen to refer to these constructions explicitly confirms that TEs are nothing other than "tax" expenditures.

Despite the aforementioned arguments in favor of the thesis that the analyzed categories are two similar expenditure instruments used to implement fiscal policies, in fact they are not identical. The scope of their application is different and the premises of using them differ as well. While direct expenditures appear to be essential for the functioning of a state, TEs may arouse controversy.

Table 1 includes the advantages and disadvantages of tax expenditures and direct expenditures. As a result of the conducted comparative analysis, it can be assumed that despite considerable similarities between these instruments, some differences can be noticed in practice. From the perspective of the transparency of public authorities, these concern chiefly transparency and the possibility of controlling. It is frequently stressed that a perfect solution would be to completely include TEs into the budget [Kleinbard, 2010, p. 361]. Such an approach would entail certain changes in the present practice [Burman, Phaup, 2011, p. 22], i.e.:

1. The values of TEs added in the budget ought to correspond with their transactional equivalence to: a) the amount of tax collected, b) tax refunds for those entities that conform to certain criteria.
2. Inclusion of TEs in the budget should take place by increasing expenditures rather than by reducing revenues.

3. The list of TEs ought to be accounted for in budget documentation, including restrictions as to the value of expenditures or directions, and (optionally) institutions responsible for spending public revenues.
4. It is necessary to include TEs into uniform procedures and the legislation process regarding the budget act.
5. The President (of the United States) ought to make an inspection of budget positions and directions of allocating public funds in order to consider the types and values of TEs.

TABLE 1.

Advantages and disadvantages of tax expenditures in comparison with direct expenditures

Criterion	Tax expenditures	Direct expenditures
Accessibility for beneficiaries	Simple, due to their automatic nature.	More complex, requiring selection.
Administrative costs	Low for exempted entities, but high for the tax system as a whole because they make it more complex.	Medium level, due to necessity of selection and allocation mechanism.
Possible abuses	Room for evasion, avoidance, and rent seeking.	Room for arbitrariness and capture of the allocating body.
Flexibility	Based on permanent laws, thereby generating stability but also inertia.	Included in annual budgets, therefore subject to regular evaluations and reallocations.
Transparency and accountability	Their automatic nature excludes control mechanisms and accountability.	Must be approved by parliament like all governmental expenditures.
Expenditure control	Expenditure determined ex post, uncertain and unlimited, which can cause fiscal imbalances.	Programmed and controlled spending, limited by budget law.
Effectiveness	Additionality in targeted action cannot be guaranteed. Suboptimal causes are financed.	Risk of subsidizing private sector and difficulty in ensuring additionality.
Equity	Only those who pay taxes are entitled, those with high income benefit the most.	Discretionality can provide more equitable access, enhancing targeting on beneficiaries.

Source: [Villela, Lemgruber, Jorratt, 2010 p. 12].

The political aspect of both the analyzed instruments must not be overlooked, either. In this context, the following disadvantages of TEs may be mentioned:

1. Tax law is considerably less frequently examined and analyzed than the budget. Therefore, "old" TEs may function much longer than direct budget expenditures.
2. The establishment of a new position of expenditures often takes place at the expense of another position. This requires constant revision of the present expenditures in terms of their usefulness. However, it does not concern those TEs that are not subject to such control.

One needs to remember that lack of control of TEs (i.e. lack of their identification, estimation and reporting) may be conducive to more intense activity of the legislator in terms of replacing direct expenditures with indirect ones.

Owing to the aforementioned characteristics of both direct budget expenditures and TEs, in practice particular countries make use of two groups of instruments in order to attain certain objectives. However, while it is possible to conduct a comparative analysis regarding direct expenditures, in the case of TEs such an analysis is difficult. This results from lack of both national and international methodological bases for analysing TEs, i.e. identification, estimation and reporting [Further: Wyszowski, 2015, pp. 63-68]. Particular countries have various experiences in this regard.

TABLE 2.
Value of direct budget expenditures and TEs in years 2009-2014 in selected countries (in bln US dollars)

	2009	2010	2011	2012	2013	2014
Poland						
Budget expenditures	95.5	97.6	102.3	98.5	101.7	99.2
TEs	19.1	22.3	24.3	22.8	24.3	25.3
TEs as % of direct expenditures	19.97%	22.80%	23.80%	23.21%	23.94%	25.53%
USA						
Budget expenditures	5 320	5 550	5 580	5 680	5 680	5 850
TEs	1 050	1 080	1 170	1 170	1 280	1 190
TEs as % of direct expenditures	19.68%	19.39%	21.01%	20.61%	22.57%	20.35%
Canada						
Budget expenditures	210.1	266.0	273.2	275.0	267.3	no data
TEs	175.9	207.2	217.7	245.4	226.4	no data.
TEs as % of direct expenditures	53.65%	53.46%	53.18%	59.48%	55.53%	
Australia						
Budget expenditures	358.8	448.0	538.6	562.4	546.9	524.4
TEs	88.9	105.8	114.7	119.6	116.0	115.6
TEs as % of direct expenditures	24.77%	23.61%	21.29%	21.27%	21.21%	22.05%

Source: calculations on the basis of OECD data and national statistics.

The presented data show that the range of state intervention by means of TEs is different than in the aforementioned jurisdictions and ranges from 4.34% in relation to the GDP in Poland in 2009 to 13.49% in Canada in 2012. However, it needs to be emphasized that the interpretation of the data in the context of international comparative analysis is rather disputable. It results from the fact that the degrees of identification and estimation of the positions of particular TEs differ across countries. Furthermore, the selected methods of estimating their value are not identical. However, even such a limited analysis justifies the statement that these instruments are used frequently despite the fact that their value in particular countries varies. For example, in Canada the value of applied TEs equals to more than 60% of direct public expenditure. In Poland,

on the other hand, the value of this type of support stands at around 25% of the expenditures controlled by the Parliament and has increased in recent years. It means that a considerable part of public expenditure is outside the budget list. This frequently creates the illusion that public expenditures do not increase, while public finances are stable.

TABLE 3.
Relation between the value of direct expenditures and TEs to GDP in years 2009-2014 in selected countries (in bln US dollars)

	2009	2010	2011	2012	2013	2014
Poland						
Budget expenditures/GDP	21.72%	20.40%	19.32%	19.52%	19.40%	18.17%
TEs/GDP	4.34%	4.65%	4.60%	4.53%	4.64%	4.64%
USA						
Budget expenditures/GDP	36.87%	37.10%	35.96%	35.17%	34.01%	33.65%
TEs/GDP	7.26%	7.19%	7.55%	7.25%	7.68%	6.85%
Canada						
Budget expenditures/GDP	17.94%	16.54%	15.58%	15.14%	14.98%	no data
TEs/GDP	13.08%	13.06%	12.21%	13.49%	12.47%	no data.
Australia						
Budget expenditures/GDP	35.45%	34.53%	35.05%	35.40%	35.46%	36.04%
TEs/GDP	8.80%	8.20%	7.60%	7.50%	7.40%	7.60%

Source: authors' own calculations on the basis of OECD data and national statistics.

4. The relation between *tax expenditure* and fiscal illusion

The analysis of TEs as a manifestation of fiscal illusion was conducted on the basis of the economy of the United States. The selection of the United States can be justified by the availability of data regarding the values of TEs used there. The United States was the first country to undertake identification, estimation and reporting of this type of public expenditures. Additionally, it was assumed that the occurrence of fiscal illusion leads to increased public expenditures. In accordance with this assumption, our empirical analysis uses statistical data from the OECD [<http://stats.oecd.org/>] and The Joint Committee on Taxation from the years 1999-2015 [<https://www.jct.gov/publications.html?func=select&cid=5>] regarding the percentage participation of TEs and public expenditures in GDP.

TABLE 4.

Tax expenditures and public expenditures in the United States
(in bln US dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Government Current expenditures	2.90	3.03	3.23	3.44	3.62	3.85	4.13	4.32	4.63
TEs	0.58	0.62	0.69	0.81	0.84	0.90	0.89	0.94	1.03
	2008	2009	2010	2011	2012	2013	2014	2015	
Government Current expenditures	4.89	5.32	5.55	5.58	5.68	5.68	5.85	6.04	
TEs	1.13	1.05	1.08	1.17	1.17	1.28	1.19	1.24	

Source: authors' own work on the basis of data from The Bureau of Economic Analysis and The Joint Committee on Taxation.

The data presented in table 4 imply that a considerable increase in public expenditures (by 108%) was recorded in the years 1999-2015. Meanwhile, the value of TEs in the same period of time increased slightly more, i.e. by 114%. Thus, one may assume that in order to implement their fiscal policies, state authorities are increasingly inclined to replace explicit budget expenditures by the hidden form of support in the guise of TEs.

TABLE 5.

Model – summary

Model	R	R-squared	Corrected R-squared	Standard error of estimation	Statistics of change				
					Change of R-squared	F changes	df1	df2	Significance of F change
1	.674 ^a	0.454	0.417	2.24122	0.454	12.457	1	15	0.003

a. Predictors: (Constant), tax expenditure (V1)

Source: authors' own work .

First, the correlation between the analyzed variables, i.e. tax expenditures and public expenditures, was examined. A positive one-sided correlation of 0.01 was observed because the value of the Pearson linear correlation coefficient amounted to 0.674. The obtained result indicates the existence of a cause-effect relationship between the two analyzed categories. In order to check what proportion of the variance of public expenditures being the consequences of fiscal illusion may be explained by the independent variable, i.e. TEs, a linear regression analysis was used.

TABLE 6.

Results of regression model's estimation

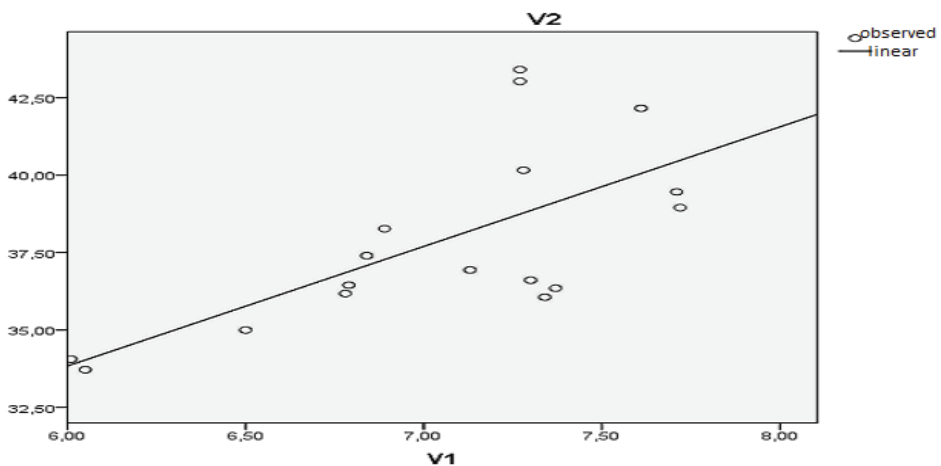
Model		Unstandardized coefficients		Standardized coefficients	t	Significance
		B	Standard error	Beta		
1	(Constant)	10.673	7.732		1.380	0.188
	Tax expenditures (V1)	3.861	1.094	0.674	3.529	0.003

^a Dependent variable: public expenditures (V2)

Source: authors' own calculations.

On the basis of the obtained results of the regression model, it was found that the independent variable, i.e. tax expenditures (V1), explains 45% of the total variability of the public expenditures ($R^2=45$). It means that the remaining 55% of the variants of public expenditures ought to be explained by other factors. Furthermore, the impact of tax expenditures on the level of public expenditures proved to be statistically significant. This is confirmed by the results of estimating the regression coefficient. The result of the estimation presented in Table 6 shows that tax expenditures (V1) constitute an essential predictor of public spending (V2) because coefficient B amounts to 3.86 at the significance level $p < 0.05$. The relationship between tax expenditures and public expenditures in the years 1999-2015 is presented in Figure 1.

FIGURE 1.
Tax expenditures versus public expenditures in years 1999-2015



Source: authors' own work.

Figure 1 confirms that the increase in the direct method of financing public spending in the form of tax expenditures only *ex ante* means an apparent decrease in public expenditures and at the same time reduction of fiscal illusion because *ex post* this results in a reduction of tax revenues and, consequently, in increasing both public spending and fiscal illusion.

5. Conclusion

The consequences of making indirect expenditures outside the budget process can be considered in several aspects. Firstly, direct “back-door” expenditures, theoretically – by creating a certain fiscal illusion through an ostensible reduction of the level of public expenditures – do not constitute any burden to the budget, but are a convenient instrument of activating economic processes or income redistribution, frequently used by the governments of particular countries. However, in reality, by causing loss of tax revenue, they may negatively affect the state budget equilibrium or even lead to increased fiscal burdens for the entire society. Thus, it is an undeniable fact that they ought to conform to the budget procedure that is proper for traditional/direct expenditures. Secondly, making expenditures outside the approved budget means that planning and control of the expenditures loses its obligatory quality. This is particularly important from the perspective of the efficiency and effectiveness of these expenditures. And this is what seems to be most crucial. Assuming that TEs are equivalent to direct public spending, it is necessary that both types of expenditures comply with the same budget procedure as well as control and evaluation of which type of expenditures is more effective and better suited for accomplishing desired socio-economic objectives.

The lack of efficient control of TEs may constitute an incentive to using these instruments in order to escape traditional expenditures, which are considerably more transparent. Their usage may be a convenient solution that will enable efficient simulation of reforms in the field of public finances. TEs make it possible to increase expenditures on public programs even when, officially, attempts are made to reduce them. All the more that once passed, TEs do not require formal annual approval, whereas the procedure of implementing them into the tax system is less complicated than in the case of direct expenditures. This is the case in, e.g. the United States of America, where in recent years the growth rate of TEs has been clearly higher than that of direct public spending, creating the illusion that public finances are more stable than they really are.

The authors' participation in the preparation of the article

Ryta Dziemianowicz, PhD, Professor of the University of Białystok – development of the research concept, developing results, preparation of the introductory section, formulation of the summary – 25%

Aneta Kargol-Wasiluk, PhD – development of the research concept, carrying out the research; literature analysis – 25%

Anna Wildowicz-Giegiel, PhD – carrying out the research, developing results, literature analysis – 25%

Adam Wyszowski, PhD – carrying out the research, developing results, data collection and literature analysis – 25%

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