Economic issues of tax reforms

Экономические проблемы налоговых реформ

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Tax expenditure as a problem in intergovernmental relations

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ABSTRACT

Tax expenditures are well known in all countries. However, they are of low repute, not only because politicians often use them to disguise relief for interest groups in the tax code, but also because they are seen as less targeted and less efficient than direct expenditure. In this article, two hitherto neglected aspects of tax expenditures are discussed. The first of these is tax shifting and what it implies in terms of outcomes. The second and more important is the problem caused by tax expenditures in the area of intergovernmental relations, which arises from the effects of tax expenditures in the intergovernmental system. In the article, these effects are highlighted and described in detail: (1) vertical effects of tax expenditures, reflecting the impact of tax expenditures on budgets at different levels; (2) horizontal externalities, which characterize the effects of tax expenditures on budgets at the same level; and (3) the negative impact of tax expenditures on equalization processes. All of these effects are systematized in various ways; together, they present a coherent approach for later empirical country studies

KEYWORDS

Tax expenditure, tax benefit, incidence, externalities, intergovernmental relations, equalization, horizontal equity, tax competition, tax exporting, expenditure spill-overs, expenditure competition, grants, contribution, unfunded mandate

JEL H22, H23, H71, H73

HIGHLIGHTS

- 1. The effects of tax shifting on tax expenditure are described according to a systematic approach. The outcome of shifting consists in changes in the pattern of the intended beneficiaries
- 2. Criteria are developed for judging the various vertical effects of tax expenditures in the system of intergovernmental relations. A three-dimensional tax expenditure classification schema was developed in order to systematize these effects
- 3. Horizontal externalities from tax expenditure within intergovernmental relations are demonstrated in a comprehensive way
- 4. It is demonstrated that tax expenditures may disturb the intended equalization pattern. For instance, tax expenditures for personal equalization and grants for regional equalization may lead to sizable discrepancies between the outcomes of these two channels

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Налоговые расходы как проблема межбюджетных отношений

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КИДАТОННА

Налоговые расходы как инструмент экономической политики имеют немало недостатков, в связи с чем зачастую считаются менее эффективными, чем прямые расходы бюджета любого уровня. Большинство этих недостатков весьма подробно описаны в существующей экономической литературе. Однако дискуссия, развернутая вокруг них, не затрагивает в настоящий момент по крайней мере два весьма важных аспекта этой проблемы, которым и посвящена представленная статья. Во-первых, это проблема «переложения» налоговых расходов или, иными словами, присвоения выгод от их существования лицами, на которых они не были ориентированы. Во-вторых, и что более важно, это проблемы межбюджетных отношений, порождаемые наличием у налоговых расходов особого рода эффектов, проявляющихся в условиях многоуровневой системы государственного устройства. В отношении последних в статье выделены и подробно описаны (1) вертикальные эффекты налоговых расходов, отражающие влияние налоговых расходов на бюджеты разных уровней; (2) горизонтальные экстерналии, характеризующие эффекты налоговых расходов на бюджеты внутри одного уровня бюджетной системы; а также (3) негативное влияние налоговых расходов на процессы межбюджетного выравнивания. Названные эффекты систематизированы в целях формирования целостного подхода к дальнейшим эмпирическим исследованиям влияния налоговых расходов на межбюджетные отношения

КЛЮЧЕВЫЕ СЛОВА

Налоговые расходы, налоговая льгота, налоговое бремя, экстерналии, межбюджетные отношения, выравнивание, горизонтальное равенство, налоговая конкуренция, экспорт налогового бремени, внешние эффекты, конкуренция расходов, межбюджетные трансферы, финансовая помощь, нефинансируемый мандат

ОСНОВНЫЕ ПОЛОЖЕНИЯ

- 1. В систематизированном виде описаны эффекты, возникающие в результате «переложения» налоговых расходов (присвоения выгод от их существования лицами, для которых они напрямую не предназначались). В результате сделан вывод о том, что в результате переложения структура бенефициаров налоговых расходов может существенно отличаться от задуманной законодателем
- 2. В целях оценки и систематизации вертикальных эффектов выработаны необходимые критерии, а также проведена трехмерная классификация налоговых расходов в межбюджетных отношениях
- 3. Описаны горизонтальные эффекты налоговых расходов в межбюджетных отношениях, возникающие в результате влияния налоговых расходов одной территории на жителей близлежащий территорий
- 4. Обосновано, что в ряде случаев налоговые расходы могут помешать процессам межбюджетного выравнивания. В частности, это возможно в случае, если налоговые расходы перераспределительного характера и дотации на выравнивание бюджетной обеспеченности распределяются по территории страны в соответствии с противоречащими друг другу критериями

1. Introduction

Tax expenditure, which takes place in every country, is an instrument by which governments choose to relieve enterprises and individuals of some tax burden by means of a tax exemption instead of extending direct payments to them. As compared to the use of direct expenditure, the tax expenditure is often questioned in terms of its effectiveness. Tax expenditure becomes particularly problematic when it occurs in a federal system with several layers of government. In this context, the aim of this article is to identify undesirable effects that emerge if tax expenditure is used in federal systems. Before this can be done in any larger study on a country¹, some preliminary considerations concerning tax expenditure in general - and in intergovernmental relations in particular — are required.

There is an extensive literature on tax expenditure, both on its specifics and on the difficulties of assessing it empirically. Assessments were made early in the USA, accompanied by early theoretical work on tax expenditure in general. Later assessments were made in Canada [2], Australia [3] and other countries, including Germany, where it also has existed officially for many years [4] and is the subject of regular empirical studies [5; 6]. While not taken up in detail here, this thorny issue of assessment is important for any country study. Rather, this paper will take a systematic theoretical approach to the study of tax expenditure.

In the general literature on tax expenditure, two aspects seem to have not yet been analyzed in detail:

- 1. What happens to tax expenditure in the process, to which any tax or tax change is subject, from announcement affects to tax shifting etc.? Knowledge of these effects is an important aspect in the study of intergovernmental relations.
- 2. The relation of tax expenditure to the specifics of a federal system appears to have not been the subject of any serious study.

Consequently, the first part dwells somewhat longer on tax effects, while the second part elaborates the basic issues that arise when tax expenditure occurs within a federal system. The federal system is analyzed as a three-layer system, comprising the federal government, a middle level (states, oblasts, lander etc., hereafter referred to as state level), and a local level. The local level is not further divided into a district level (rayon, Landkreis etc.) and its constituent local governments.

2. Why is tax expenditure a subject of concern?

2.1. What is a tax expenditure?

The most effective means of specifying what is meant by tax expenditure is to compare it to direct expenditures carried out to achieve the same aim. Direct expenditure provides the recipients - whether enterprises or individuals – with an amount of money. Tax expenditure tries to do the same, but in an indirect way, with the recipients being permitted to pay lower taxes than would otherwise have been the case. This can occur, for example, in the income tax system by either reducing the tax rate on the intended activity or by leaving that activity out of the tax base. Another example is VAT. In this case, one can exempt those goods from taxation that are assumed to be primarily purchased by low-income citizens. Alternatively, the tax rate can be reduced for these classes of goods, as is the case in countries like Germany, where there exist two VAT rates of 7 % and 19 %. From this comparison it is obvious that the term tax expenditure is somehow misleading, since it is not an actual expenditure, but is rather designed to achieve the same effect as the equivalent amount of direct expenditure. A term like tax subsidy might be better; however, the term tax expenditure is applied here because it is the most widely used term, including in Russia.

A more precise definition of tax expenditure is needed when data are to be analyzed. To take the example of VAT, what exactly is meant by "goods for daily use" etc., which then is subject to the lower rate? The same is true for business

¹ This is the case in the ongoing work by S. Bykov on tax expenditure in the Russian Federation [1].

taxation. There is something like a normal tax base for the tax on profits, so whatever differentiation occurs between elements of the calculated profit is not to be considered as a tax expenditure [7–10, etc.].

In empirical terms, direct expenditure and tax expenditure show up in very different parts of budget policies and statistics. When a direct expenditure is decided upon politically, it is determined during the budgetary process and becomes part of the budget. Consequently, its size can be obtained by looking into budget figures. The amount of tax expenditures, on the other hand, cannot be ascertained directly in any regular document. Rather, they are shown in the figures on tax revenue to the extent that that amount is lowered. There is no annual automatic registration of these figures, as occurs with direct expenditures. Therefore, in order to find out about tax expenditures, sophisticated work is necessary. One approach would be to assess the amount for certain individual cases, be they enterprises or private households, and then multiply by the respective group. In general, such indirect method is necessary in order to study the amount of tax expenditure in a country.

2.2. What happens to tax expenditure through shifting?

The result of the assessment is a volume of statistics on tax expenditures in a particular country. The interpretation of these figures then takes place according to various objectives — in this case, their role in a multi-layer, federal system. At this

point it is necessary to analyze what happens to them in reality - again, in comparison with direct expenditure. In order to analyze this theoretically and empirically, one has to draw on completely different sections of public finance theory. In the case of direct expenditure, the effects are relatively clear. The recipient receives directly a certain amount of money and is most probably able to use it fully. Of course, there exists in principle the counterpart shifting activity, which takes the form of "expenditure snatching" [11, p. 328] in which the recipient is deprived of certain advantages. When a considerable rise in pensions occurred in Germany, it could be observed that the price of typical goods bought by pensioners rose more in retail shops in locations near where pensioners typically lived than elsewhere, thus reducing the advantage of the higher pension. However, in general one can assume that the advantage of the direct expenditure stays with the recipient.

That is different for tax expenditures. They are part of a tax and share, so to speak, the fate of that tax on its way through shifting to "the final resting place" [12, p. 216]. Since there already exists a large literature on these taxation effects, tax expenditure has to somehow be inserted into that analysis. Some aspects of this, which have been pointed out by Burton [8, p. 116–117], are systematically inserted here. The system referred to in Figure 1 is used in a German public finance textbook in which a whole chapter is dedicated to tax effects [13, p. 123].

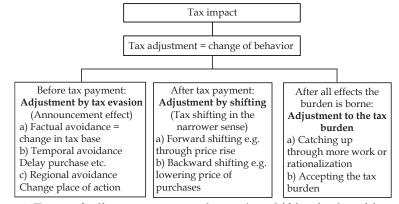


Figure 1. Types of adjustment to a tax change (tax shifting in the wider sense)

The whole process starts with a tax impact, mostly triggered by a change in the tax code. Enterprises and individuals then try to adjust to this by some change in their behavior. The system is built up as a sequence, starting from the announcement of a tax (1). At that stage, the tax can be avoided in several ways. To the degree that it cannot be avoided, a tax payment occurs. Then the tax can be shifted to somebody else (2). If that does not work, the resulting tax burden can lead to more efforts to catch up (3). And if that does not help, the tax burden has finally to be borne. It should be noted that the three "stages" in Figure 1 are shown as stages. However, in reality, they may - and often will — occur simultaneously.

1. Starting with the first stage: to the degree that the tax with the exemption is avoided (left part of Figure 1), the advantage does not reach the recipient. If the taxpayer avoids an income tax by not declaring his income, the intended special advantage does not reach him. The same is true for a subsidy to enterprises by means of a tax exemption if tax avoidance occurs in the field of enterprise taxation. However, if the avoidance took place illegally, the tax-payer-to-be has at the same time lost his legal tax expenditure in that process. It should be noted in addition that all forms of tax expenditure reach only those people who pay taxes.

2. A major issue is the possible shifting of the tax burden once the tax has been paid or is reasonably expected to be paid. Irrespective of whether the tax has been shifted forward by raising the price of sold products or backward by decreasing the price of the purchased goods, there is a question as to what tax expenditure means in this situation. Looking at forward shifting, if a sizable tax expenditure has been granted there is probably less need to shift or only the need for the remaining tax payment to be shifted. The same is true for backward shifting. To put it in general terms, the higher the tax exemption, the lower the tax load which is considered for shifting. This is particularly important in market forms where shifting is difficult, for instance because of inelastic supply.

3. The question of adjustment to the tax burden (right part of Figure 1) is similar. Only the final tax burden, which consists of the full tax minus the tax expenditure, is a tax burden and could lead to efforts to catch up one way or the other.

Summing up over all stages of tax adjustments, the result is apparent: the tax expenditure lowers the tax load and thus reduces the need for any of the three types of tax adjustment. However, compared to direct expenditure, the effects additionally further blurred. Not only are tax expenditures difficult to calculate as foregone revenue but, additionally, it remains unclear which recipient receives how much of the intended amount. This further reduces the effect of targeting a tax expenditure, which is anyway lower than for direct expenditure. If a targeted tax expenditure is meant as an incentive for an objective considered politically significant, the incentive is reduced to the degree that the tax burden is avoided or shifted. An example of this is subsidies paid to enterprises to increase their investment in poor regions.

Another aspect of the tax burden, which is intensively discussed in public finance literature, is the notion of excess burden [12, p. 277–296]. This means, that in addition to the burden of paying the tax, there exists the burden of having to adjust to the tax burden one way or the other, resulting in a loss of efficiency. Issuing a tax expenditure produces such an excess burden because it causes the tax-payer to deviate from his previous preferences. However, the existence of a tax expenditure might at the same time alleviate this problem to a degree because there is a lower tax burden to adjust to.

In addition, it is helpful in this discussion to distinguish between tax expenditure by a lower tax rate versus tax expenditure as a reduced tax base. There is a notion in optimal taxation [14, p. 527–528] that the same tax revenue raised by a high tax rate on a small tax base induces more excess burden than if the same tax revenue stems from a low tax rate on a broad tax base. So far, the difference between the effects is not clear enough because

"the same revenue" implies that a higher tax rate necessarily goes together with a smaller tax base and that a broader tax base is accompanied by a lower tax rate.

Now let us move from "the same revenue" to the politically more important case of designing a tax expenditure for a group of beneficiaries without considering tax revenue. Then the question arises whether a lower rate or a wider base is more efficient. To put it differently: What influences efficiency more: a variation in tax rate or a variation in tax base? This question is also a subject in the discussion on tax reform alternatives which, from a different angle, seem to support this notion: "Tax rate cut cum base broadening" [15]. At the same time this notion is probably behind the attitude of investors to look at tax rates first when comparing the tax systems of several countries. Therefore, whatever the outcome of this discussion, it is likely to be significant for the analysis of tax expenditure. The comparison of tax expenditure in the form of a lower tax rate versus a narrower tax base inevitably leads to the question as to which of the two instruments have less negative effects.

2.3. Why is tax expenditure chosen as instrument?

Already early in the discussion on tax expenditures, their negative aspects featured strongly, implying that they should be thoroughly assessed and reduced as far as possible [16; 17, etc.]. However, given their continuing existence, it becomes salient to ask what kind of advantages tax expenditures have compared to direct expenditure as an instrument of policy? An obvious answer here is that in case of tax expenditures the administration cost involves the simple application of a tax rule, whereas direct expenditure requires to be administratively channeled to each recipient.

However, the question concerning why a certain instrument is chosen also leads to the field of political economy or public choice theory. This approach includes the interests of the acting persons and the influence of the institutional setting, including voting procedures etc.² Starting with direct expenditure, it can apparently be shown to be targeted much better than tax expenditure. Money handed out by government usually follows strict rules which document the recipient and the amount received, whether this be a subsidy to enterprise or social expenditure aimed at natural persons. A politician may choose this instrument for instance if he wants to demonstrate to his constituency that he provided money in a well-documented way to people who are then grateful to him, for instance in elections.

On the other hand, this direct expenditure has considerable disadvantages for the politician since the amounts show up in precise figures in the budget and underlie the annual budget revision, thus becoming the subject of criticism from parliament and the media. As a consequence, expenditure amounts are liable to be reduced or abolished in each annual budget review. Compared to this, a tax expenditure offers considerable advantages. The tax expenditure amount is not known beforehand and thus cannot be discussed precisely at the time of introduction. Ex post, the amount is only visible in tax revenue - and there with difficulty. Moreover, the fact that this tax exemption exists at all is only documented in the relevant tax law. In contradistinction to annual budgets, a tax law is in principle "for eternity", meaning that any revision needs discrete political action.

Taken together, these arguments try to answer the question of why tax expenditure is in itself a subject of concern. Because it can be used to obscure the intentions of politicians to support certain groups, it thereby reduces the desirable quality of transparency in political processes and access of critical research into these political actions.

So far, the discussion has been rather abstract. Therefore, an example is given, which is intended to show how important these issues can be when they are the subject of research into the field of intergovernmental relations.

² For an overview see [13, p. 195–214].

Since unwilling to subsidize directly some activity, a federal government can, for example, grant equivalent nationwide tax exemptions to taxes otherwise paid to the regional and local budgets. This may be aimed at relieving the federal budget of the burden of the expenditure, which would otherwise have to be a direct federal budget expenditure. Additionally, tax benefits can be provided by a federal government for taxes that are paid to the federal budget, but for activities which have obvious territorial boundaries (e.g. mineral resource extraction, certain recreational activities, port activities etc.). In effect, this resembles a grant given to specific regions. Moreover, similar examples can be given at the state level. In this kind of situation, tax expenditures are used not only as a means of financing, but also as an element of intergovernmental relations, which forms the subject of the following section.

3. Effects of tax expenditure in intergovernmental relations³

3.1. Vertical effects from tax expenditure

3.1.1. Criteria to judge these effects

A system of vertical effects, which can be induced by tax expenditure in a federal system is introduced in the following. If they are to be judged, then certain criteria are necessary⁴:

- assignment criterion functions with their respective expenditure and revenue sources have been clearly assigned to the levels of government;
- purposiveness criterion each expenditure item is described precisely by purpose and recipient;
- free decision criterion each level is free to decide on the purpose and the recipients of its own expenditure, no one should interfere with this freedom of levels to use their resources;

- horizontal equity criterion — any transfer from a higher to a lower level should be distributed according to the specified rule (for example evenly across the level or unevenly according to a criterion such as taking fiscal need and fiscal capacity into account).

It seems that many of the problems caused in federal systems by tax expenditures arise from the fact that these criteria are applied to tax expenditure in a different way in comparison to how they are applied to direct expenditure.

For **direct expenditure**, certain rules can be assumed. Some of these may seem trivial, but are necessary to show the difference between direct expenditure and tax expenditure:

- 1. The level of the budget, which finances an expenditure item, is determined by the distribution of functions between the levels, as was previously explained.
- 2. The purpose and the final recipient are generally determined in an exhaustive manner in the relevant documents.
- 3. Usually a budget finances expenditure for its own functions. If the expenditure finances a function of a lower level, one speaks of a grant; if a higher level is financed, one speaks of a contribution. In both cases, only the financing level decides, but the receiving level obtains the benefit.
- 4. If a grant is distributed between different budgets of a level, it can either occur evenly or according to certain criteria.

With regard to **tax expenditure**, the situation is almost the opposite.

- 1. The assignment criterion is not met, because tax **expenditure** is characterized by the amount of **revenue** that has not been received at a particular budgetary level. Therefore, the level that finances the expenditure is in this case determined not by the distribution of **functions** between the levels, but by the distribution of **revenues**.
- 2. Neither the purpose nor the final recipient (beneficiary) of a tax expenditure is determined in an exhaustive manner; moreover, even if the purpose could somehow be assumed, the problem with the beneficiary still exists, because the tax

³ Mostly based on [1].

⁴ Some of the criteria are well known from constitutional documents (freedom), others from fiscal federalism literature [18–20] etc. They have been adjusted here to be helpful in the special discussion of tax expenditure in the intergovernmental relations.

can be shifted, as was shown in Part 1. Consequently, the purposiveness criterion is also often not met.

- 3. If tax expenditure constitutes an advantage for one level at the expense of another, one should additionally refer to the existence of a grant. To give an example, a federally granted VAT exemption for childcare reduces the need for the local support of kindergartens. However, in this case, nobody speaks of a grant to the local budgets, though it works like a grant to the local level. Moreover, such a grant might even be exercised by a decision of a third party so that the free decision criterion is not met. For example, in Russia a tax exemption from the **regional** transport tax exists for **local** passenger transport, which is granted by the **federal** level.
- 4. If a tax expenditure is interpreted as a grant, it should be noted that its horizontal distribution between different budgets of a level - and thus between regions - is not the same as the distribution of an equivalent grant. Here childcare can again be used as an example. Local government can subsidize it for poor parents by not asking a fee. For the same purpose, the central government could exempt childcare fees from VAT. The incidence is different, both in personal and regional terms. The VAT exemption cannot differentiate between rich and poor parents, whereas the local government can. This is the effect on personal distribution, but it also has implications for regional distribution. On average, rich parents live in rich regions, whereas in poor regions parents tend to be poor. Thus, the horizontal equity criterion is additionally not met.

To exemplify these statements, it might be useful to divide all tax expenditure into different types, based on three simple questions:

(1) Which level decides to grant the tax expenditure? This question is not new: There are many studies which distinguish between tax expenditures according to the level at which the decision to establish the tax exemption took place [5; 6 etc.]. However, as a rule, the studies are limited to the calculation of the tax

expenditure amount incurred by a decision of a particular level; consequently, they do not look into the problems of intergovernmental relations, which arise in connection with this. For the simplicity of the following analysis, it will be referred to as the **deciding level**. Nevertheless, we shall also specify here that if several levels are involved – for example first the federal government provides local authorities with the right to grant a tax benefit and then local authorities decide on the tax benefit itself - then the deciding level shall be defined as the level taking the **final** decision on the terms of how the tax benefit is applied in practice (which, in the given example, is the local level).

The remaining questions are more important in the context of intergovernmental relations.

(2) Which level bears the lost tax money? Tax expenditures are still revenues, albeit not received. Therefore, it is always known which of the levels bears this fiscal burden. Moreover, if we consider this question in relation to the first one, we will obtain some very interesting combinations, where one level decides and the other one finances the consequences of this decision. Therefore, for the following analysis, it will be referred to as the financing level.

The third question adds one more dimension to this classification. In short it says: (3) Which level is obliged to perform the financed function within the federation? The main idea here is that tax expenditures as well as direct expenditures have to have a purpose, i.e. a function, and thus require to be assigned to one of the levels in accordance with the distribution of functions between the levels. It is at the advantage of this level that the tax expenditure occurs. Therefore, this level will be referred to as the **supported level**.

It can be seen that this third question adds one more dimension to the analysis. Taken together, these questions provide the possibility to classify tax expenditures depending on their effects in the system of intergovernmental relations, which will form the main topic in the discussion below.

3.1.2. Structuring the vertical effects of tax expenditure

This section of the paper deals with the various effects that a decision at one level in a federal system exerts on the other levels. To demonstrate the totality of these effects, a classification of tax expenditures is needed. For every tax exemption, the classification shows the three dimensions discussed above: the deciding level, the financing level and the supported level.

The whole classification may look like a cube having its sides defined by these three dimensions. In addition, the various levels of government have to be taken into account in each of the three dimensions. Each side is therefore built up by the levels of government, in this case federal, state and local (*F*, *S*, *L*).

The result is a cube which contains 27 blocks or cube cells. Within the cube, each cell is defined first of all by the three dimensions. In addition, within each dimension the cell is defined by one of the three levels of the federal system (Figure 2).

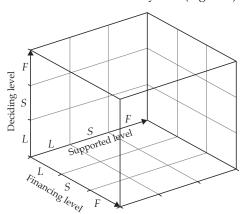


Figure 2. Three-dimensional classification of tax expenditures in intergovernmental relations

In order not to distract the reader by a great number of examples in a layer-bylayer analysis, a selection is made, based on important conclusions of the analysis.

For sake of simplicity, each combination is represented in a code where

- the first letter refers to the level that decides on the exemption;
- the second letter refers to the financing level or, in other words, the level

bearing the fiscal burden of the tax expenditure;

- the third letter refers to the level is supported — or, in other words, taking responsibility for the financed function⁵.

Taken together, each code consists of three letters in a *DFS*-sequence (deciding-financing-supported). In this sequence, *F* stands for the Federal level, *S* for the State level and *L* for the Local level. As an example, the combination *FSS* means that the exemption is granted (1) by the decision of the federal level, (2) at the expense of the state budget and (3) in fulfilment of a state function. Similarly, *SSL* means that the state decided the exemption at the expense of the state budget to address local issues.

The analysis of the whole set of combinations permits to single out intergovernmentally-consistent and intergovernmentally-flawed tax expenditures. **Intergovernmentally-consistent** are those expenditures that are consistent with the criteria mentioned above. Actually, there are only two types of them:

1. Tax expenditures, which are almost equal to the usual direct expenditures, arising in the case where deciding, financing and supported levels coincide (FFF, SSS, LLL blocks).

The VAT zero tax rate for space-related activities in Russia is a perfect example for an FFF block. According to the constitution, all space-related activity is assigned to the central government, and the VAT goes entirely to the federal budget. Thus, no other level but the federal is involved. In this kind of situation, a tax expenditure can be considered as a direct expenditure without any intergovernmental effects.

⁵ For the sake of simplicity, we do not take into account here the situation where the assignment criterion is not met (fully or partially), as it is true for example for the so called "shared functions", which are very important in Russia. If tax benefits are aimed at such a shared function, the issue is much more complicated and will be the subject of a separate later study. Likewise, the situation in which the purposiveness criterion is not met and a tax expenditure has no relation to the functions of any of the levels, is also not touched here and will be the subject of a future study.

A similar example can be given for the state level: in the territory of the Irkutsk region (Russia), disabled people are provided with tax exemption for the transport tax. According to Russian legislation, social support and social services for disabled people are assigned to the state (region). Therefore, taking into account the fact that the transport tax goes entirely to the state budget, such an exemption does not create negative effects in intergovernmental relations, because those who decide to issue the tax expenditure, who have to bear the burden and whose function is fulfilled, all coincide in one level.

2. Also consistent with the criteria are tax expenditures that are almost equal to a *contribution,* i.e. cases where deciding and financing levels coincide, while the supported level is higher (*SSF, LLF, LLS* blocks). Consequently, in Figure 3 all arrows are — in the end — pointing upwards.

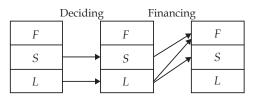


Figure 3. Tax expenditures equal to a contribution

In terms of an example for an SSF block, exemption from the corporate property tax (which is a state revenue) for airports of federal importance may be considered. In this case the state decides and pays, while the federation is supported. However, since the state has decided to grant this exemption independently, it follows all the criteria and there is no real need to address these kinds of situations.

Intergovernmentally-flawed tax expenditures, on the contrary, being inconsistent with criteria mentioned above, introduce flaws in intergovernmental relations. They include at least 4 types:

1. One type of tax expenditures is almost equal to a *matching grant*, arising in cases where deciding and financing levels coincide, while the supported level is lower than the financing level (*FFS*, *FFL*, *SSL*

blocks, Figure 4). Here all arrows — in the end — point downwards.

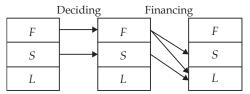


Figure 4. Tax expenditures equal to a matching grant

In these cases, functions of the state (FFS) or local authorities (FFL, SSL) are financed from the higher budget. For example, in Russia, charities are exempted from VAT, while support for socially-oriented non-profit organizations and charity are functions of the state. Likewise, childcare services are also exempted from VAT; these are the responsibility of local authorities. In such cases, one can speak of a financial support provided to the citizens of a local community. This is in effect the same as a matching grant. However, a grant is always distributed among the beneficiaries according to specific criteria derived from personal characteristics, while tax expenditures generated by VAT are given to all respective consumers without taking into account their need or any other criteria. In this case, then, the problem in intergovernmental relations induced by tax expenditures is quite obvious because the result of the distribution depends on the financing channel: tax expenditure versus direct expenditure. Consequently, tax expenditures lead to a violation of the horizontal equity criterion.

2. A second type of tax expenditure is almost equal to *general expenditure under the decision of the higher level*. These arise in cases where the deciding level is higher than the financing level, while financing and supported levels coincide (*FSS*, *FLL*, *SLL* blocks, Figure 5).

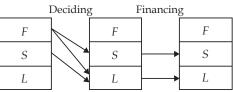


Figure 5. Tax expenditures, equal to general expenditure under the decision of the higher level

In FSS, the central government decides, but the financing is provided for a state function from the state budget. An example is the federal exemption for agricultural machinery within the transport tax. The support of agricultural producers in Russia is assigned to the states; if the state had a choice, it could decide either to give a direct expenditure to some farmers or to give a tax exemption. However, this decision was instead made by the federal government. Exactly the same situation arises when the federation grants a tax relief to support the local function at the expense of the local level (FLL). An example is the federal exemption from the payment of land tax for organizations of native arts and crafts, whose support is the task of the local authorities. One more block (SLL) can be illustrated by the tax exemption of childcare services from the Russian small enterprise tax ("patent tax"). The tax is a revenue of local budgets, but the exemption is made according to a decision of the state.

Potentially, this kind of situation may be observed with regard to direct expenditures as well; for example, when the federal government establishes some rules and standards that require a certain level of spending on some subnational function. Both, tax expenditures and standards reduce local expenditure possibilities and divert local expenditure from local preferences. Nevertheless, state authorities have a choice either to spend money or not, while in the case of tax expenditure they do not have such a choice. Consequently, the free decision criterion is not met here.

3. Tax expenditures that are almost equal to an *unfunded mandate* arise in cases where the deciding level is higher than the financing level, while the financing level is lower than the supported level (*FSF*, *FLF*, *FLS*, *SLF*, *SLS*, Figure 6).

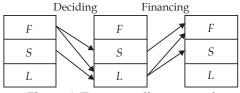


Figure 6. Tax expenditures equal to an unfunded mandate

This kind of problem can arise, for example, when the federation decides to issue a tax exemption in its own favor, but at the expense of the state (*FSF*). An example is the exemption for military transport from the transport tax in Russia, while defense is assigned to the federation and the transport tax is a revenue received at the level of states. A similar situation can be observed if the tax exemption is given in favor of the local budgets (FSL). It happens in Russia, for example, with the exemption from the transport tax of local passenger transport. In each case, the federal decision generates a so-called unfunded federal mandate - a lower budget obligation to spend money on the higher levels function which is not provided with financing. It is obvious that this constitutes a violation of the free decision criterion.

Other examples include land tax exemptions⁶ — for the organization of the penitentiary system (*FLF*), which is a federal function — as well as for the non-profit organizations of disabled people (*FLS*), which is a state responsibility.

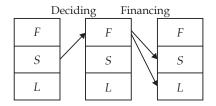
An unfunded mandate is somewhat similar to a contribution: both require that the receiving level be higher than the financing. But in case of the contribution, the deciding level and financing level coincide, while in the situation of the unfunded mandate the deciding level is always higher than the financing level.

4. Tax exemptions which are almost equal to a *requested matching grant*⁷, arise in cases where the deciding level is lower than the financing level, while the financing level is higher than the supported one (SFS, SFL, LFS, LFL, LSL, Figure 7).

These situations are quite unusual, because they contain an obvious discrepancy. The decision in these cases is made by the lower level, while the financing is provided by the higher level. As a rule, this is possible only if the higher level has provided such an opportunity in the legislation. An example from the practice of Rus-

⁶ The land tax is in other countries a part of the property tax, together with the taxation of buildings.

⁷ Requested is a type of grant which is only given after a formal application has been filed.



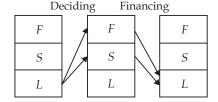


Figure 7. Tax expenditures, equal to a requested matching grant

sian fiscal federalism may be the situation where, according to a decision taken by a state, a special economic zone is created. The special tax regime for such zones presupposes a lot of tax exemptions, which also incur a burden from tax expenditures for the federal budget [21]. In other words, in this particular case it is a grant from the federal budget given at the request of the state. As such, it has the same flaws as a usual grant does — the incidence of such grants may be different from the incidence of direct expenditures for the same purpose. Consequently, the horizontal equity criterion is again not met.

There are some other examples; however, limitations as to the scope of this paper do not permit to them all be described. For the same reason, an empirical analysis of each of the described types of intergovernmentally-inconsistent tax expenditure will be the subject of a further study [1]. In this paper, the sole purpose was to study merely in principle the impact of such tax expenditures within the system of intergovernmental relations. This constitutes a very important means for identifying ways of solving the problems that arise in this context. The solution can either work through a change of the existing tax rules (to make tax expenditures compliant with criteria mentioned above) or through the use of the intergovernmental transfer system.

In particular, tax expenditures similar to unfunded mandates may be addressed by adjustments within the system of intergovernmental transfers because in this case adequate compensation is required from the other level. A separate question is which level of government should compensate: the one that decided to introduce a tax exemption or the one whose function was fulfilled this way. Likewise, tax

expenditures similar to matching grants (including requested ones) may also be addressed by adjustments within the intergovernmental transfer system if the distribution of such "subsidies" does not meet the horizontal equity criterion.

Now we turn to the case where a tax expenditure is equal to a general expenditure, but the decision to grant it is made by the higher level. The example was the federal exemption for agricultural machinery within the transport tax. These cases cannot be addressed by adjustments inside the intergovernmental transfer system but have to be carefully studied in order to identify the scale of the problem and find possible solutions by changing the existing tax rules.

At the end of this section discussing vertical effects, an additional issue is addressed. There is a term which is widely used for vertical situations in which fiscal decisions made by the government at one level affect not only its own budget, but also that of the government at another level. This term is vertical fiscal externalities [22; 23]. A typical case is an increase in the income tax of states and local governments in the USA, which make use of the common pool of the income tax base in the country. They thereby limit the possibility of the central government to do the same, because this would result in a too-heavy financial burden to the taxpayer, and the central government feels responsible for this. This effect is unintended by the subnational action. The inter-level effects of various types of tax expenditures, which have been described above, can to some degree be called vertical externalities, but only insofar as those who decided on these tax expenditures probably did not intend these effects to occur. Usually, issuing a tax expenditure at the expense of another level of government is a deliberate action. Therefore, these are rather genuine effects of tax expenditures, which arise in the presence of several levels of government, and should consequently be treated as effects, not as side-effects, as the term "externality" would indicate.

3.2. Horizontal externalities from tax expenditure

Horizontal fiscal externalities from both tax and expenditure occur when the independent policies of governments at a given level have effects on residents or governments of neighboring jurisdictions on the same level [19, p. 38]. As to the horizontal effects of taxes as such, these have been sufficiently studied in the literature [24; 25 etc.]; to some degree, tax expenditures have also been touched on there. For example, in relation to the tax externalities it has long been accepted that tax incentives provided by local authorities increase tax competition between territories and thus indirectly influence the tax revenues of neighboring territories. Another horizontal effect on the tax side is **tax exporting**: by providing a relatively favorable tax regime for activities with a mainly local area of consumption and, at the same time, imposing taxes mostly on activities consumed by residents of other regions (e.g. hotels, touristic activities, goods exported outside the region etc.), it is possible to shift the tax burden to the residents of neighboring jurisdictions.

Turning to the expenditure side and its externalities (Figure 8), the expenditure ex-

ternalities of what is called here "direct expenditures" have also been dealt with in the literature for a long time. But if it comes to the "expenditure externalities of tax expenditure" (see right side of Figure 8), they are still neglected. For instance, expenditure spillovers are usually considered as a benefit (or harm) generated by the expenditure policy of one jurisdiction to the residents of neighboring jurisdictions. So far, these spillovers have been researched in respect to direct expenditures only. However, expenditure spillovers could be observed in respect to tax expenditures as well: their existence in this case may be explained not only because locally provided goods can be used by residents of other regions, but also because almost anyone could become the beneficiary of that expenditure through tax shifting. In other words, due to the absence of an obvious recipient of the tax expenditures, the number of channels for spillovers multiplies.

To show these effects, we shall single out two types of tax expenditures (depending on the scale of the benefits and their beneficiaries [26]), namely:

- narrowly targeted and
- more universal tax expenditures.

Narrowly-targeted tax expenditures have a very specific beneficiary. This can be:

- the taxpayer himself (e.g. tax exemptions from direct taxes);
- the consumer, who buys the taxpayer's goods (e.g. VAT exemptions with respect to goods with elastic demand);
- the person who supplies the taxpayer with resources (e.g. decreasing co-

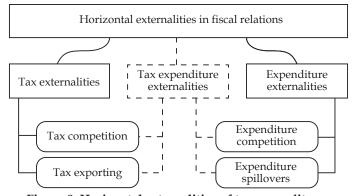


Figure 8. Horizontal externalities of tax expenditures

efficients to the tax rate, applied in case of employment of disabled people);

- in different proportions both the taxpayer and the consumer, as well as the person supplying the taxpayer with resources (e.g. VAT exemptions for goods with inelastic demand).

If the local authorities have definite knowledge as to the ultimate beneficiaries of their tax expenditures, it not only gives them the ability to make informed and efficient decisions in the field of local tax policy, but also helps them to identify cases and directions of tax expenditure spillovers.

For more universal tax expenditures, one cannot specify the beneficiary. If they were truly universal, society as a whole would benefit as a result of the positive externalities from such activity; however, this would seem to be an unlikely objective for a local tax expenditure. Consequently, the occurrence of spillovers is highly dependent on the nature of the activity to be funded. If, for example, an exemption from the land tax is granted for sports facilities or private schools, then the target area is coherent with the local consumption area and does not generate more risks of spillovers than similar direct expenditures would. Conversely, if the exemption provides benefits for an activity with a wider area of consumption and thus is more universal, for example an exemption from the land tax for land used for special environmental purposes, the exemption from the transport tax for electric cars, or the exemption from the property tax for solar-powered houses or research institutes, then they potentially lead to obvious expenditure spillovers, which might give reason to act somehow on the national or subnational level.

Expenditure competition as another expenditure externality is also quite possible to observe in the case of tax expenditures (Figure 8 above). For example, tax exemptions may be aimed at the intensive development of specific infrastructure (e.g. tax benefits for energy or development companies). These, in turn, can attract a tax base to the region (for example housing), thereby importing it from other regions.

Thus, both tax- and expenditurerelated externalities are to be studied in relation to tax expenditures in order to develop the principles that should be used for formulating tax exemptions for state revenue or local revenue taxes. This is of particular importance if we take into account as a possible outcome of this work new approaches to internalize these externalities by making a decision at the federal level, or to minimize their negative impact in other ways by some kind of collective local decisions on the subnational level.

Here, however, a note of caution is necessary, which applies to any externality. The mere existence of an externality is in itself not a reason to react to it. This was shown in the discussion of environmental externalities [27]. To look at externalities in terms of their effect and importance should therefore precede any political advice for action. One should always consider the option of not intervening. For that, it is helpful to thoroughly assess the consequences of just letting the externality happen and then confront the outcome with the cost of intervention.

3.3. Tax expenditure as equalization disturbing element

This final part of the paper does not relate to all tax expenditures, but rather to a certain type of them — those addressing distributional goals. The problem of tax expenditure in intergovernmental relations that can be observed here occurs as a result of the discrepancy between two equalization channels, which exist in any federation.

As to the first channel: since taxes are regarded as an important tool of redistribution in a society (beside social expenditure), quite a few tax exemptions in every federal state are targeted at supporting the poor. In this sense they aim at what is called here **vertical equalization**: reducing the nationwide gap between rich and poor, as expressed by the difference in their net income.

At the same time, there is a second channel of equalization, which is usually exercised in a federal state through the system of equalizing grants, here referred to as **horizontal equalization**. The ultimate objective of this system is dependent

on the methodology used for the grant distribution. Typically, it is "fiscal capacity equalization" (*FCE*) or "horizontal equity equalization" (*HEE*)⁸. What is important here is that the equalization exercised through the intergovernmental transfer system is aimed not only at interpersonal equalization, but also (and in the first place) at interregional equalization.

In general, both channels of equalization do not impede each other but rather work together to achieve the common objective in both dimensions - horizontal and vertical. This working together can be observed when the intergovernmental transfer system is based on the FCE methodology and in a situation, in which the rich and the poor are almost evenly distributed between regions so that all regions are quite close to each other in their level of average income (which is the case in Germany for instance). In this situation, both equalizing channels will reduce the gap in both dimensions, i.e. between regions and between people.

However, in a number of cases these channels of equalization can work in an uncoordinated manner or even in opposite direction — this will form a major topic in a later study.

Lack of coordination may be observed, for example, if two elements come together: (1) the intergovernmental transfer system is based on the HEE methodology; and (2) regions are internally more or less income-homogeneous but strikingly different across the country as a whole. In this situation, where truly rich and poor regions exist side by side, tax expenditures aimed at vertical equalization will be effectively working as transfers from the rich regions to the poor, while equalizing grants will be just redistributing the revenue between regions with the same fiscal capacity in accordance with their fiscal need. To put it differently, the equalization exercised through the tax expenditures will be aimed only at interpersonal equalization, not taking into account the difference in the fiscal need between the regions. At the same time, the intergovernmental transfer system will be aimed only at the interregional equalization, leaving out the gap between rich and poor people in the federation.

This situation might look like a mere utopian ideal, almost impossible in practice (both because *HEE* methodology is almost not used in the world and because the difference between regions within any country is usually not that large [29]). However, it exemplifies very well the difference between the directions of equalization, exercised through different channels.

In practice and irrespective of whether FCE or HEE methodology is applied, situations are frequently observed where redistributive tax expenditures and equalizing grants work in the opposite direction, even though this may sound paradoxical. The general reason for this is the low degree of tax expenditure efficiency when it comes to distributive objectives. A more precise reason is the dependence of the amount of tax expenditure received in a region on the purchasing power of the population in the region. The most convincing example are VAT exemptions: previous studies in Russia [30] showed that VAT exemptions for education and healthcare, which in theory were designed to address equity9 issues [31, p. 47; 32, p. 21; 33, p. 14-15; 34, p. 36 etc.; 35, p. 35; 36, p. 13], have the opposite effect in practice. Tax expenditure per capita in a region caused by this kind of tax exemption has a strong positive correlation with the average income level in a region. In other words, instead of narrowing disparities, these tax expenditures mostly accrue in rich regions, making disparities wider.

The mechanism of this effect is quite obvious, as the following example shows. When the same reduced tax rate is applied for bread (for instance 7 % instead of 19 % in Germany), no matter whether it is cheap or expensive, then the advantages of tax expenditures received by the population in rich regions (where people buy expensive bread) will be considerable, whereas in poor regions (where people buy the cheap variant) they are smaller.

⁸ For an overview see [28].

⁹ Under the concept of equity it would be helpful to help the poorest, because this would bring them close to the average poor. At the same time inequality in relation to the rich is reduced.

At the same time, the regional distribution of equalizing grants will work the opposite way. Consequently, when tax expenditures with a strongly marked distributional objective are distributed across the regions without taking into account either fiscal need or fiscal capacity, as is typically the case, then disparities arise.

Therefore, some issues have to be addressed in respect to this kind of equalization-oriented tax expenditure. Should one target the tax expenditure distribution the same way as it is done with respect to the equalizing grants? If not, how exactly should they be distributed? If their distribution is far from ideal, should the government correct this effect within the intergovernmental transfer system?

In any case it should be noted here that as a result of the use of tax exemptions (like those which were given above for the VAT), the inter-territorial differences are obviously exacerbated. Huge sums of tax expenditure are changing the situation of people in different regions in favor of regions with high average income, thereby

undermining fiscal equity. These effects therefore require additional study, assessment and adjustment, either at the level of tax legislation or within the system of intergovernmental transfers.

4. Concluding remark

This paper contributes to the new field of tax expenditure as a problem in intergovernmental relations. The problem is huge due to the fact that tax expenditures account for large amounts in many countries. Moreover, the problem is caused by very particular effects caused by tax expenditure and experienced in the area of intergovernmental relations. For any empirical study in a country, an analytical framework is needed, which has so far been lacking. The framework developed here is intended to clarify which kinds of effects may occur. There are many of these: some are of a horizontal type, while others work vertically between the levels of government. Taken together, they should lead in any given country to specific measures to reduce the observed problems.

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