



MECHANISMS FOR DETERMINING AND DISTRIBUTING STATE TRANSFERS BY MUNICIPALITIES

D. Ushatova*

Department of Regional Development, Trakia University, Stara Zagora, Bulgaria

ABSTRACT

The study aims to present the main characteristics of state transfers for municipal budgets (total subsidy for state-delegated activities, total equalization subsidy, targeted subsidy for capital expenditures, transfer for winter maintenance and snow removal and other current transfers), their purpose and mechanisms for their determination and distribution by municipalities. The specific rules for their spending by the municipalities (targeted and non-targeted) are derived, presenting the introduced control mechanisms on the powers of the local authorities for their spending. The correspondence of the used indicators for distribution of the state transfers by municipalities to the expenditure needs is studied, by making an experimental comparison and grouping of the municipalities according to their revenue capacity for providing these expenses. The changes in the share of the individual types of transfers in relation to GDP, the consolidated fiscal program, the state budget and the municipal budgets are also presented. The general trends for a five-year period are established and the general conclusions are determined, the main one of which is that the local budgets are strongly dependent on the state transfers. Based on the results of the study, some key areas are proposed for improving the distribution mechanisms and development of the regulatory framework in the country.

Key words: state transfers, municipal budgets, indicators for distribution, expenditure needs

INTRODUCTION

The discussion on the effective allocation and spending of public resources is especially relevant in the pre- and post-election periods, as well as in post-crisis periods. Often, however, the general understanding of the application of the basic principle - "efficiency" does not correspond to the statutory definitions, according to Art. 20, item 6 of the Public Finance Act¹ and according to §1, item 2, b. "A" of the Law on the National Audit Office, namely the extent to which the goals set by the budget organizations are achieved by comparing the actual and expected results of their activities.

*Correspondence to: Daniela Ushatoova
Department of Regional Development, Trakia
University, Stara Zagora, Bulgaria, e-mail:
d_ushatova@abv.bg

According to the Constitution of the Republic of Bulgaria, our country is a single state with local self-government. The municipality is the main administrative-territorial unit in which the local self-government is carried out. Citizens participate in the management of the municipality both through the bodies elected by them and directly through a referendum and general assembly of the population. The municipality has the right to its own property and an independent budget, outside the republican one, can determine the amounts of the local taxes within the limits by law, as well as the amounts of the local fees. The permanent financial sources of the municipality are determined by law, and the state supports the normal activity of the municipalities with funds from the budget. These basic constitutional norms also correspond to the basic principles for

financing the municipalities established by the European Charter of Local Self-Governmentⁱⁱ, namely:

- Part at least of the financial resources of local authorities shall derive from local taxes and charges of which, within the limits of statute, they have the power to determine the rate.
- The financial systems on which resources available to local authorities are based shall be of a sufficiently diversified and buoyant nature to enable them to keep pace as far as practically possible with the real evolution of the cost of carrying out their tasks.
- The protection of financially weaker local authorities calls for the institution of financial equalization procedures or equivalent measures that are designed to correct the effects of the unequal distribution of potential sources of finance and of the financial burden, they must support. Such procedures or measures shall not diminish the discretion local authorities may exercise within their own sphere of responsibility.
- Local authorities shall be consulted, in an appropriate manner, on the way in which redistributed resources are to be allocated to them.
- As far as possible, grants to local authorities shall not be earmarked for the financing of specific projects. The provision of grants shall not remove the basic freedom of local authorities to exercise policy discretion within their own jurisdiction.

In thought of mind, this report also examines the effectiveness of the system of government transfers and in terms of a World Bankⁱⁱⁱ, publication citing a 1995 Shah study on the compliance of this system with several criteria^{iv}:

- Revenue adequacy: the subnational authorities should have sufficient resources, with the transfers, to undertake the designated responsibilities.
- Local tax effort and expenditure control: ensuring sufficient tax efforts by local authorities. Formulas should not encourage fiscal deficits.
- Equity: transfer should vary directly with local fiscal needs and inversely with local fiscal capacity.

- Transparency and stability: the formulas should be announced, and each locality should be able to forecast its own total revenue (including transfers) in order to prepare its budget.
- In addition, the formulas should be stable for at least a few years (3-5 years) to allow long-term planning at the local level.

There is also a connection with the advance of some of the requirements of COUNCIL DIRECTIVE 2011/85 / EU of 8 November 2011 on requirements for budgetary frameworks of the Member States, which was done in the post-crisis years, at European level and in Bulgaria. As of January 1, 2014, a completely new Law on Public Finance entered into force in Bulgaria, which repealed the Law on the Structure of the State Budget and the Law on Municipal Budgets. Legislation on the budgetary framework, general structure and structure of public finances, incl. and for municipal budgets it was substantially changed. Although European regulations and directives do not require the introduction of more restrictive measures by Member States vis-à-vis sub-national authorities, restrictions on the conduct of revenue and expenditure policies by local authorities have been maintained and even increased in Bulgarian legislation. Regarding the types of transfers from the state budget to the municipal budgets and the manner of their determination and / or distribution, no substantial change was made.

In this regard, the purpose of the study is to assess the effectiveness of mechanisms for determining and allocating government transfers to municipalities, outlining some bottlenecks in the legislation and formulate specific guidelines for further analysis and change.

MATERIAL AND METHODS

1. Characteristics of the system of state transfers in Bulgaria for the period 2003-2021

For the purposes of the study, some summary indicators are derived that show the fiscal importance of government transfers. The share of state transfers in the CFP, in the total subsidies provided under the State Budget Law and in the municipal budgets was studied. The results for the period 2003 - 2021 are presented in **Figure 1**.

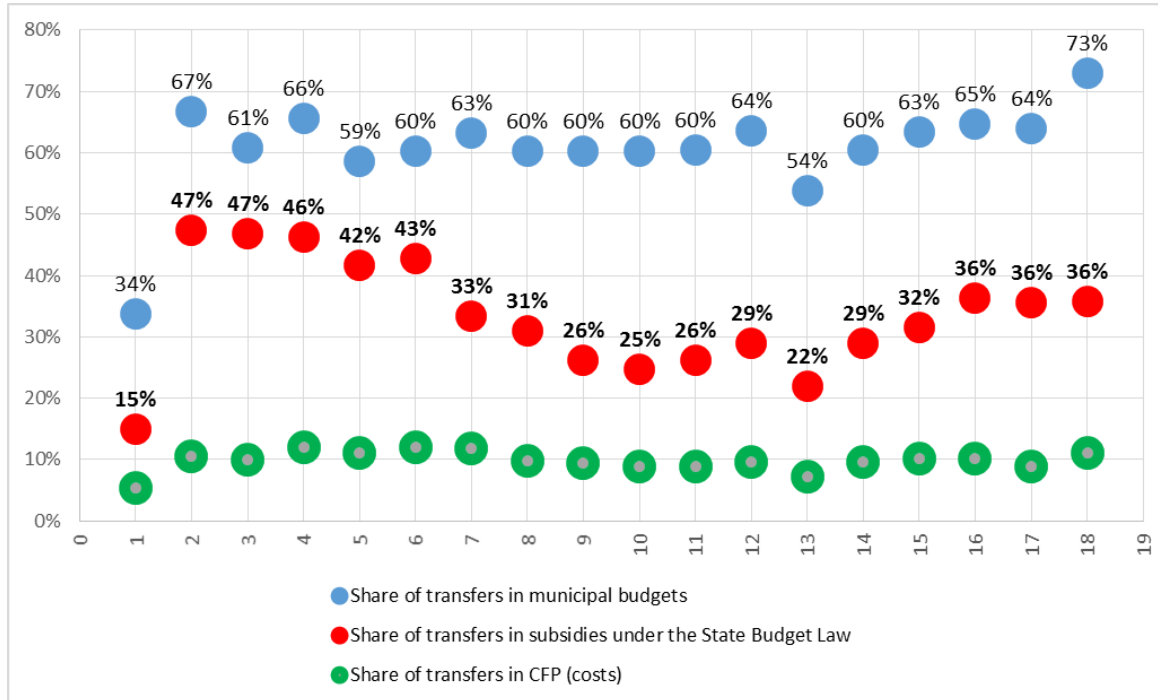


Figure 1. Share of transfers for municipalities for the period 2003 - 2020 by report

It is evident from the graph that the transfers from the central budget for the municipalities for 18 years. Period occupy an increasing share, reaching an unprecedented 73% in 2020. Since 2009, the share of subsidies for municipalities in the amount of total transfers provided by the central budget has decreased by 10 points, and in the following years (after the crisis period) this trend is deepening. For the whole period, the share of subsidies for municipalities in the CFP

remains relatively low - between 9-12% or an average of 10%.

The data on the implementation of the State Budget Law for the period 2016-2020 were studied. As an absolute amount, the transfers for the municipalities take second place after those for the Social Insurance Funds. The structural distribution of the transfers provided under the State Budget Law on the so-called autonomous budgets are presented in Figure 2.

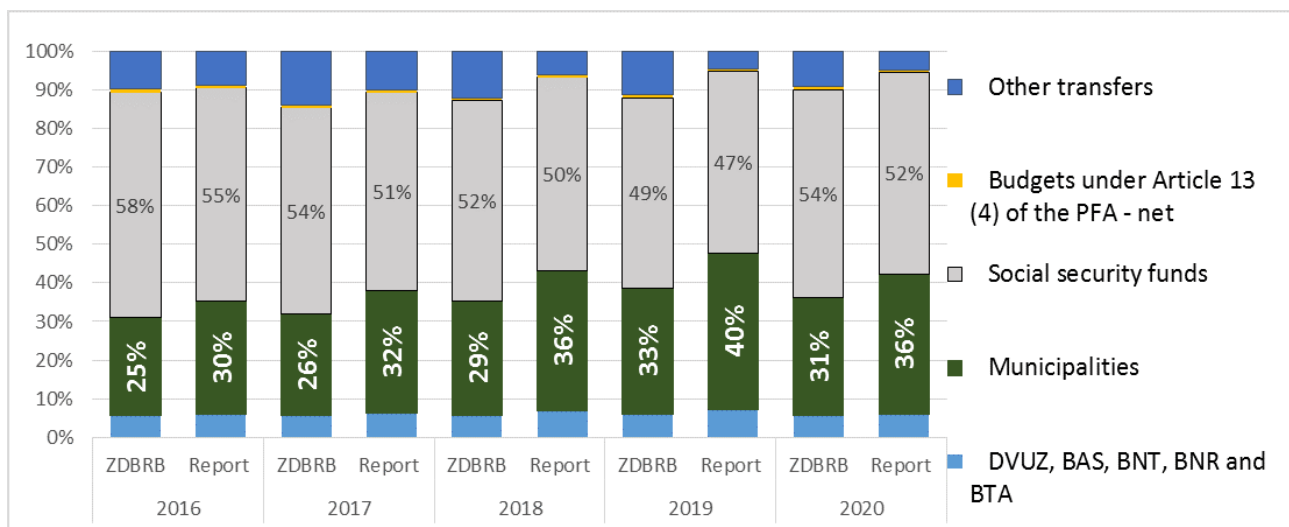


Figure 2. Structure of transfers under the State Budget Law 2016-2020

It is noteworthy that only in the case of municipalities the funds are "retained" in the central budget and are provided additionally in the process of its implementation, unlike the "comfort" of other organizations to have the necessary funds at the stage of adoption of the State Budget Law. For the studied period, the amount of these "retained" in the central budget funds for municipalities is over half a billion levs, reaching 1.285 billion levs in 2020. The use of such an approach limits the ability of municipal

councils to independently decide on the spending of subsidies., as their additional provision in the budget implementation process is usually subject to a number of targeted requirements and conditions. Last but not least, the financing of the municipalities with the additional funds provided by the central budget increases the administrative burden related to the reporting and control of these public resources.

Table 1. Data by years and by types of transfers for municipalities for the period 2003 - 2021

Types of subsidies under the State Budget Law	for activities delegated by the state		Total equalization subsidy	Compensation for cancellation road tax	For winter podd. and snowfall	Targeted capital expenditure subsidy		
	Year total subsidy activities delegated by the state	Transfer for re-assignment of personal income tax				Target subsidy	Ecological sites	For construction and repair of common roads
2003	271	100% ¹	15			70	30	
2004	309	726	35			27	32	
2005	328	762	70	44		53	32	
2006	479	705	83	58		65	40	
2007	504	790	104	58	10	68	40	45
2008	1 531		173		10	69	78	45
2009	1 991		242		14	74	82	50
2010	1 815		218		14	28	40	43
2011	1 792		241		14	28	20	43
2012	1 835		241		14	28		43
2013	1 942		241		19	52		50
2014	1 988		256		19	62		60
2015	2 067		264		23	69		63
2016	2 223		269		28	142		
2017	2 423		274		30	154		
2018	2 781		284		35	164		
2019	3 234		294		38	179		
2020	3 653		307		43	199		
2021	4 332		329		48	224		

¹ The funds from the taxes under the Personal Income Tax Act, with the exception of the tax on the one-time monetary compensations under Art. 237 of the Law on Defense and the Armed Forces of the Republic of Bulgaria and under Art. 261 of the Law on the Ministry of Interior, shall be transferred in the amount of one hundred percent from the budgets of the municipalities

Government transfers to municipalities in general are of three main types - a general subsidy for the performance of government functions, a general equalization subsidy and a targeted subsidy for capital expenditures. In different years in the period after 2003, other subsidies were granted to municipalities, which, however, have a low fiscal effect. Thus e.g. for the period reduces the number of subsidies of a targeted nature from 5-6 to 2007 to 4 main types before 2020-2021. More detailed information is presented in the attached **Table 1**.

In the post-crisis period after 2009, there has been a “retention” of the growth of most transfers to municipalities. From 2014, a gradual increase in all transfers began, as well as the consolidation of the various types of targeted subsidies. For the period 2003-2020 there is a reduction in the number of transfers of targeted nature - from 5-6

to 2007 (granting tax powers to local authorities), to 4 types of transfers in 2020-2021.

Despite this finding, the central government is increasing at a higher rate the transfers of targeted or low size, such as the total subsidy for the activities delegated by the state, the targeted subsidy for capital expenditures and the transfer for winter maintenance and snow removal. The average percentage increase in these transfers from 2014 to now is 15%, in contrast to the increase in the total equalization subsidy, where this average is only 4%.

Structurally, according to the purpose of the transfers for the municipalities, their share for financing the local needs is decreasing, at the expense of the growing share of the resource from the state budget for providing the state functions through the activities delegated by the state.

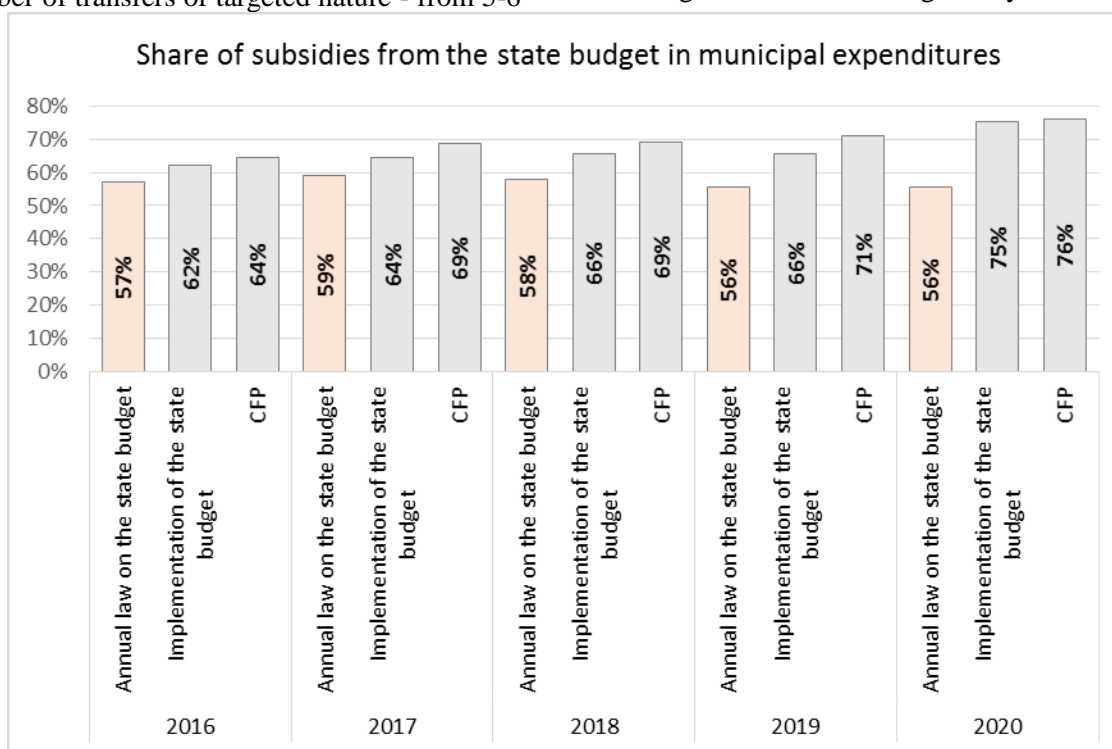


Figure 3. Share of subsidies from the state budget in municipal expenditures

Structurally, according to the purpose of the transfers for the municipalities, their share for financing the local needs is decreasing, at the expense of the growing share of the resource from

the state budget for ensuring the state functions. The changes in the share of the various transfers are presented in the following **Figure 4**.

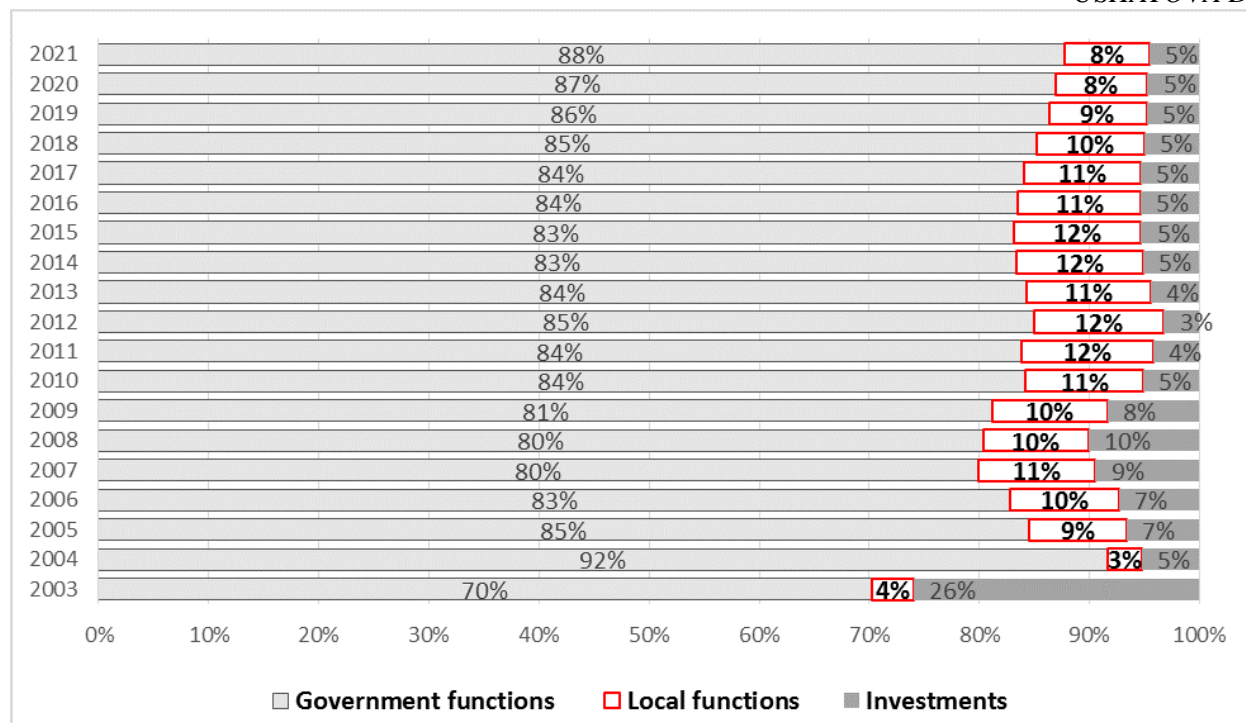


Figure 4. Structure of transfers, according to their purpose, Annual law on the state budget 2003-2021

It can be seen from the graph that at the start of financial decentralization in 2003, subsidies for the implementation of state-assigned functions, as some of the most targeted transfers accounted for 70% of transfers, while in 2021 they already form 88% or with 18 points more.

In 2003, the target subsidy for capital expenditures was BGN 70 million, which were distributed independently by decision of the municipal councils and BGN 30 million for ecological sites of a group of municipalities listed in the State Budget Law, i.e. Local authorities have full powers to self-allocate 22% of state transfers.

In 2008, when in practice for the first year new constitutional changes were applied regarding the determination of the amounts of local taxes in the legally defined ranges and the amounts of local fees, the subsidies for state functions already formed 80% share, reducing the share of self-distributed transfers. For local functions - up to 13%.

In 2016, when the target investment transfers were consolidated into a common pool - targeted subsidy for capital expenditures, the share of resources for government functions is already

83%, and that of self-distributed by municipal councils transfers is 15%.

Since 2017, the share of transfers that local authorities can dispose of independently has been decreasing annually, reaching 20% in 2021, and the share of the total subsidy for the functions delegated by the state already forms 88% of the total amount of legally defined transfers for municipal budgets.

In order to determine the needs for support of municipalities with subsidies from the state budget, expenditure needs at the local level should be clearly identified and valued, as well as to determine the optimal level of own revenues that municipalities can generate. It is generally acknowledged that the goals to be achieved at the local level are more determined by the interests and expectations of the local population and to a lesser extent by the state commitments of the local government. Proof of this judgment are the results of various sociological surveys related to local self-government and the satisfaction of citizens with the public services provided to them. For example, more than half of the surveyed citizens are more interested in the environment and quality of life and in the local

services provided by their municipality of residence (53.7%, compared to 44.9% interest in the services of the central government). There is also a strong public interest in the following public services provided by municipalities in the majority of cases (Cleaning - 89%; Administrative and technical services - 86%; Public works - 83%; Collection, removal and storage / processing of waste - 82%; Issuance of permits - 74%; Road maintenance - 72%; Transport - 67%; Maintenance of kindergartens and nurseries - 61%; Water supply and sewerage - 61%). The surveyed citizens categorically recognize as a commitment of the state the services in health care (74%), social benefits (64%) and social services (66%) and education. Unfortunately, no such detailed large-scale sociological surveys have been conducted in the last 10 years.

The provisions of the Local Finance Act and / or sectoral laws do not establish a rule for determining the total amount of the total subsidy for the activities delegated by the state, respectively for the standards for their financing and respectively for determining the total amount of the targeted capital expenditure subsidy. Such

a rule is established only for the general equalization subsidy.

It is interesting for the Bulgarian conditions that in 2003 (the start of the financial decentralization) the municipalities received 100% of the personal income tax in the form of relinquished tax, which was subsequently taken away from them with the argument that the subsidies would be significantly increased. In this regard, for the purposes of the analysis, the growth of the subsidy for the delegated activity is compared with the realized growth of the revenues from this tax.

It turns out that in 2003 the municipalities reported total revenues for financing the activities delegated by the state - from subsidies and remittances, exceeding almost three times the revenues from PIT reported in the national budget. In 2020, despite the significant increase in the resource for delegated activities, due to the increasing commitments of local authorities, the subsidy for them is 93% of the amount of reported income from PIT.

The results of this experimental comparison are presented in **Figure 5**.

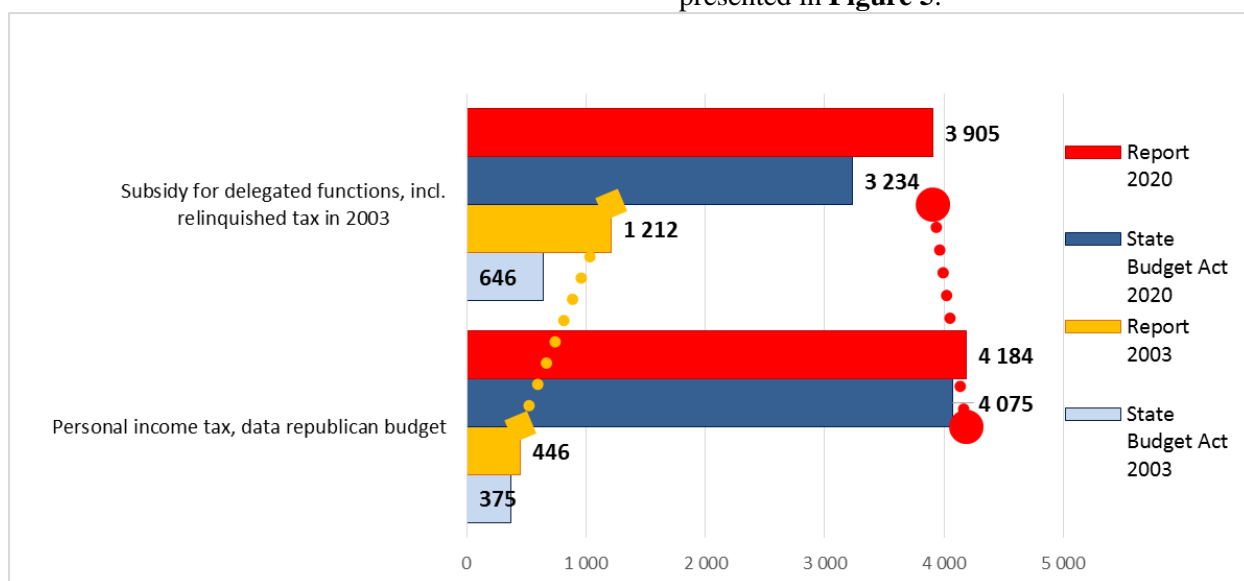


Figure 5. Growth of conditional sources for financing the activities delegated by the state, (million BGN)

It can be seen from the graph that PIT revenues in the period 2003-2020 increased 10-11 times, while the funds for subsidizing the activities delegated by the state increased only 5 times. The

main reason for this is that the line ministries and the Ministry of Finance in planning this subsidy are not obliged to take into account the needs for the provision of relevant public services, as well

as any minimum standards and requirements, but proceed mainly from the expenditure ceilings functions.

The other two subsidies, for which there is no general procedure for determining the minimum amount that can be calculated with the State Budget Law for the respective year, are the targeted subsidy for capital expenditures and the transfer for winter maintenance and snow removal. Most of the citizens daily "feel" the deficits in the investment capacity at the local level - as the quality of the road and street network, as the condition and functionality of the public infrastructure, as the arrangement of the territory and the public spaces. At the same time, the local authorities in total (own revenues and subsidies) have less than half of the resources set aside in the national budget for the same purpose. In addition, the share of investment expenditures in municipal budgets in recent years has decreased to 11% (2003 levels), in contrast to the share of these expenditures in the national budget, which varies from 7% to 17%. In the study of the share of municipal capital expenditures in the capital expenditures under the CFP (including EU funds), the municipalities realize over 50 of all public investments, and in peak years - the end of programming periods and over 70%.

Unlike the above, the PFA regulates a clear rule that the amount of the total equalization subsidy may not be less than 10 percent of the report of own revenues of all municipalities on the last annual report on the cash execution of their budgets.

2. The most important changes in the mechanisms for distribution of subsidies to municipalities

The most important changes in the mechanisms for distribution of subsidies to municipalities are as follows:

- In the case of a targeted capital expenditure subsidy:

Over the years, the mechanism for its distribution by municipalities has changed several times. The latest current criteria and maximum ratios for the distribution of funds are: number of settlements (excluding those with a population of up to 10 people) - 45%; length of municipal roads - 25%; population according to NSI data - 25%; size of the territory - 5%.

Figure 6 shows the grouping of municipalities according to the degree of change in the amount of the target subsidy for capital expenditures for the period from 2017 to 2021.

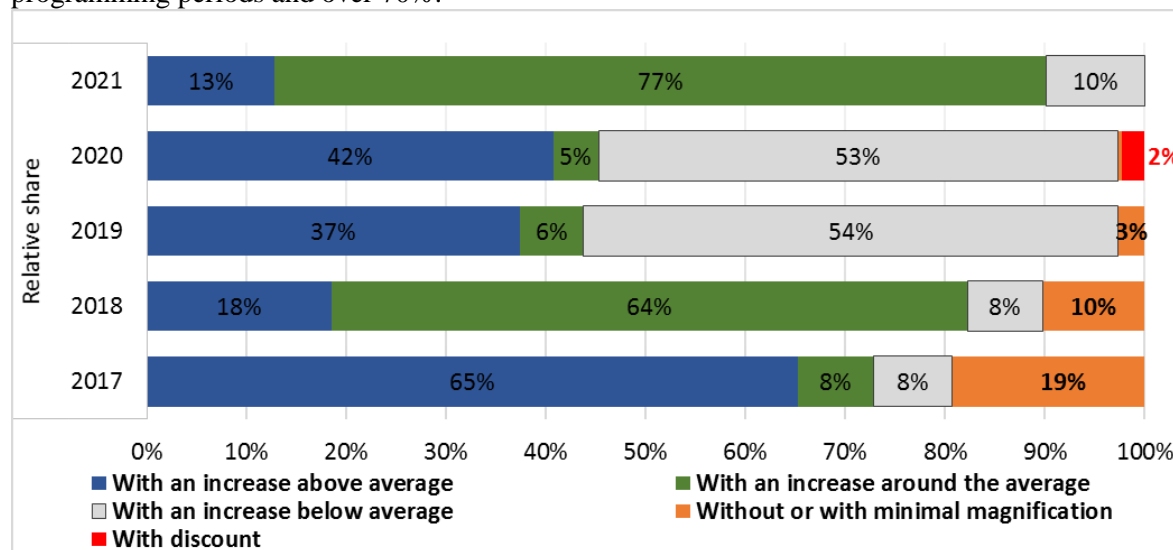


Figure 6. Groups of municipalities according to the change in the amount of the target subsidy for capital expenditures.

In practice, the changes in the mechanism for distribution of this subsidy provide an increase in the subsidy in 2021 around the average transfer

growth for the majority of municipalities (77%), above average - by 13% and below average - by 10%, eliminating the hypothesis of reduction

compared to the previous year. The different degree of increase of this transfer by municipalities is due to changes in the applied criteria, such as decreasing or increasing population or number of settlements.

- In the case of the total equalization subsidy

The mechanism for distribution of this subsidy is most often changed for the period 2003-2021. Its last change is from 2019, which is essential and introduces a condition for access - only municipalities with tax revenues per capita have the right to receive such a subsidy. -low of 120 percent of their level for the country. The distribution of funds for municipalities with the right of access has three main and two additional components, as follows:

- o The first component is formed on the basis of the revenue capacity of the municipality to generate tax revenues. It is equalized to 120% of the national average only for the conditionally defined as permanent tax revenues of the municipalities.

- o The second component is formed on the basis of expenditure needs, measured on the basis of natural indicators: number of children up to 5 years; number of children aged 6-14, number of adults aged 65 and over, territory, length of municipal roads and population, the weight of each of the indicators being determined

depending on the structure / share of expenditures for local activities at national level.

- o The third component is for the municipalities, which according to reporting data have a very low revenue capacity, i.e.. less than 25 percent.

The first additional component provides the amount of the total equalization subsidy, defined in the Law on the State Budget of the Republic of Bulgaria for the previous year for the municipalities with access.

The second additional component is for municipalities with access, which report "tax effort" above the national average. The tax effort is measured by averaging local tax rates against legally differentiated ranges.

The impact on local budgets of this mechanism largely depends on the total allocable amount and the internal allocation of the individual components of the formula. Law does not regulate this share distribution of the components and therefore the Ministry of Finance may change the relative weights of these components. Without clear argumentation, the funds from the total equalization subsidy are allocated mainly to the first component - revenue capacity with a share of 73%.

Figure 7 shows the grouping of municipalities according to the degree of change in the amount of the total equalization subsidy on municipalities.

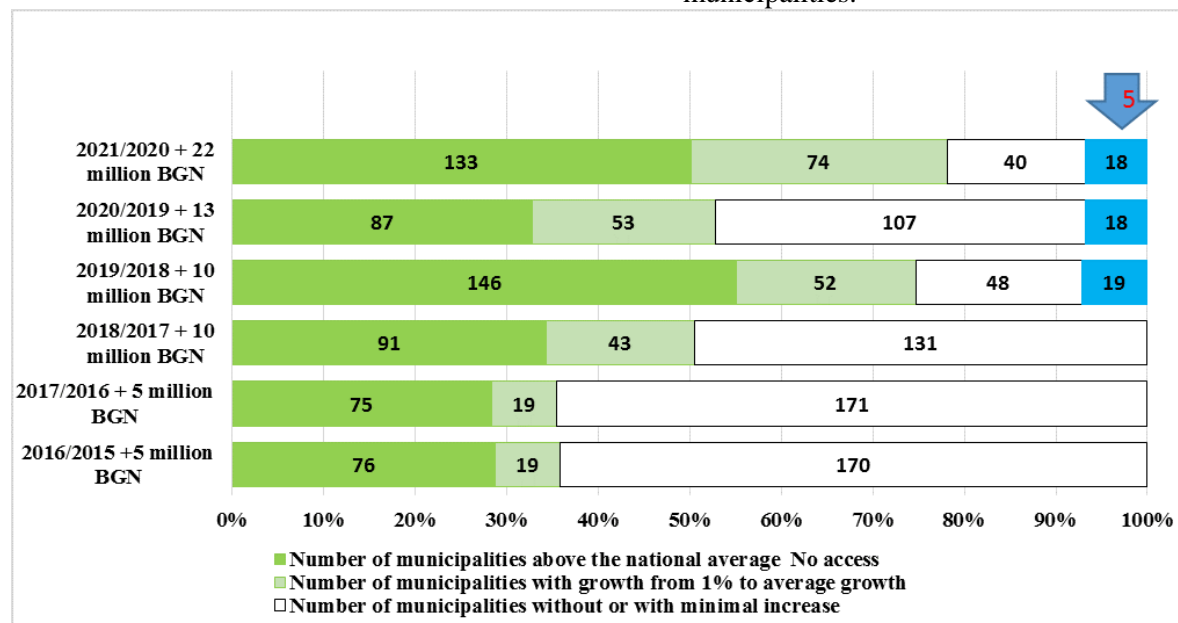


Figure 7. Groups of municipalities according to the amendments to the total equalization subsidy

It is evident from the graph that unlike the period 2015-2018, when half and over half of the municipalities have no or minimal increase in the amount of the total equalization subsidy, in the following years this share decreases. Due to the higher growth of the total amount of the subsidy, in 2021 78% of the municipalities have an increase.

Local authorities are not involved in playing out the options for allocating state transfers and find it difficult to predict their expected amount not only for a one-year period, but also in the medium and long term.

EXPERT ASSESSMENT

Results from the experimental evaluation of the efficiency of the state transfers for the municipalities in Bulgaria

Given that the negative effects of the crisis caused by Covid -19 are yet to emerge, it is appropriate to recall some lessons from the previous crisis period. For example, in its Opinion, the Committee of the Regions identified the implications for the sub-national level of governance of the previous financial and economic crisis and the debt crisis (2009-2010). At that stage, the need for savings in some Member States was used as a pretext for:

- Greater centralization of powers, for decentralization without adequate financial resources (transfer of unsecured resource commitments) to the municipalities;
- Simplification, reduction or even elimination of sub-national structures, which ultimately leads to a weakening of regional and local democracy. In some countries, sub-national authorities have

undergone a process of territorial restructuring and / or the institutional organization of governing bodies has changed significantly;

- the imposition of a trend based on the mistaken assumption that public services become cheaper by transferring them to the level of central government.

On these grounds, and in order to provide a proactive response to attempts to impose such new restrictions on local authorities, it is necessary to make a relatively objective assessment of the effectiveness of government transfers.

EMPIRICAL STUDY

To determine such an assessment, the following methodology was applied experimentally, based on the criteria described by Shah and the World Bank. The assessment of each of the transfers applied in Bulgaria for the municipalities - 3 basic and 2 additional is made on a three-point scale. A score of 1 is given when the condition is met, and the corresponding transfer meets the accepted benchmark for efficiency. Grade 2 is given when the conditions for the respective transfer are partially fulfilled and grade 3 - when the respective condition is not met. The model does not examine objectivity and fairness.

On this basis, an arithmetic mean is derived for each of the subsidies for the municipalities. The attached Table 2 presents the respective estimates according to the adopted experimental standards for efficiency and by types of subsidies.

The results of this study are presented in the **Figure 8 and Figure 9.**

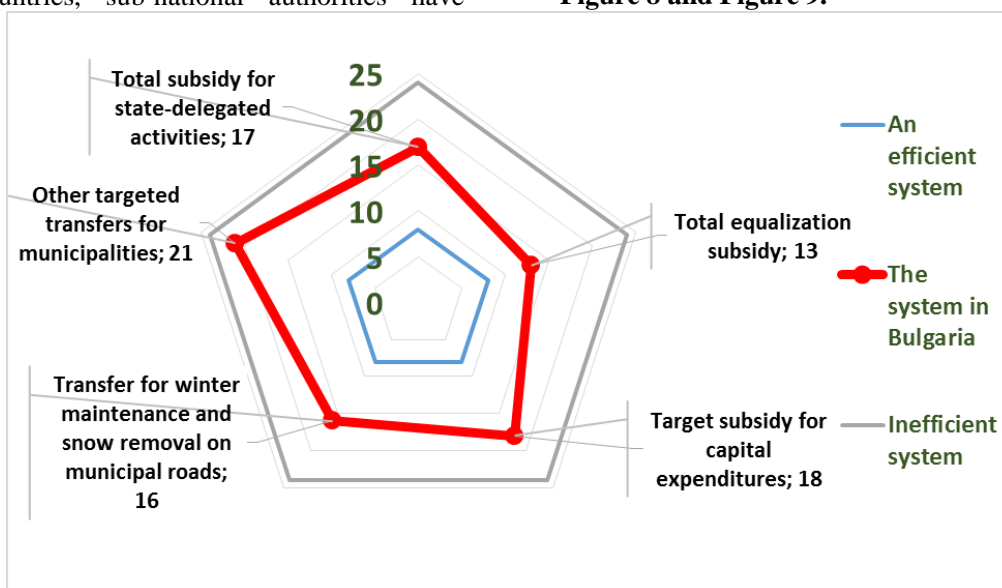


Figure 8. Estimation by types of state transfers for municipalities

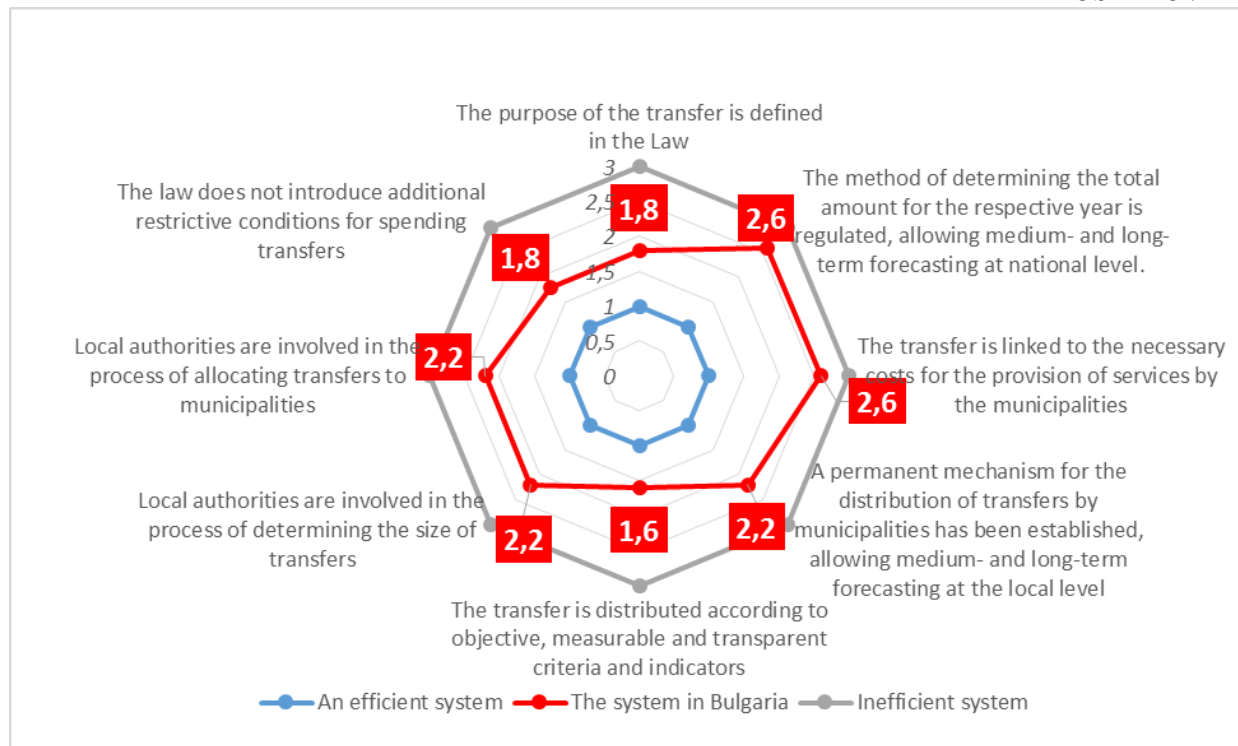


Figure 9. Arithmetic mean by types of government transfers for municipalities

DISCUSSION OF RESULTS AND POSSIBLE SOLUTIONS

In general, in Bulgaria, about 94% of the public resource - subsidies for municipalities - is determined and distributed by the state in a rather inefficient way and mechanism, and only 6% of the public resource is determined and distributed in a rather efficient way and mechanism. The deviation between the funds planned according to the annual law on the state budget and the ones reported at the end of the year is due to the additionally provided targeted subsidies in the process of budget execution of individual municipalities, which for 2020 are BGN 1.285 billion and for the previous few years - from BGN 500 million up to BGN 900 million per year. The approaches and practices applied in the country for determining and distributing state transfers for municipalities deepen the centralization and dependence of local government on the central one and limit the opportunities for development of local democracy and self-government. In practice, municipalities for most of their commitments are in a position of "direct manual control" by the central government. Local community decisions requiring more resources

that are serious are almost impossible to implement without the approval and support of the central government.

- Based on the research and in order to overcome the identified problems, the following recommendations are formulated:

- - Transition from annual budget regulation to medium- and long-term planning for the purpose of perspective, predictability and efficiency of the local financial policy, providing the vision for development.

- - Permanent determination of the mechanism for assessment of the expenditure needs and the minimum provided by the state in the form of transfers for the purpose of perspective, predictability and efficiency in the spending of the funds from the state budget.

- - Significant increase in the share of total transfers, at the expense of targeted transfers and a "ban" on the future introduction of additional restrictions for municipalities.

- - Reduction of the state control, moving only to an independent assessment of the effectiveness of the implementation of the resources provided by the state policies. In this sense, it is appropriate to increase civic participation and control, clearly

defining the mechanisms and tools for this control.

- - Limiting the "uncontrolled" transfer of unsecured resource commitments to local authorities and increasing the overall financial independence of municipalities.

- - Reforming the tax system by transferring taxes, more fully covering the taxation of various property and persons and thus providing significantly higher growth and benefits for the CFP, without the need to continuously increase the size of government transfers.

Table 2. Experimental assessment of the system of state transfers in Bulgaria

Standard for effective transfers for municipal budgets from the national budget	Total subsidy for activities delegated by the state	Total equalization subsidy	Target subsidy for capital expenditures	Transfer for winter maintenance and snow removal on municipal roads	Other targeted transfers for municipalities
The purpose of the transfer is defined in the Law	Yes	Yes	Partly	Partly	No
<i>Evaluation</i>	1	1	2	2	3
The method of determining the total amount for the respective year is regulated, allowing medium- and long-term forecasting at national level.	No	Yes	No	No	No
<i>Evaluation</i>	3	1	3	3	3
The transfer is tied to the necessary costs for the provision of services by the municipalities	Partly	No	No	No	Partly
<i>Evaluation</i>	2	3	3	3	2
A permanent mechanism for the distribution of transfers by municipalities has been established, allowing medium- and long-term forecasting at the local level	Partially, only for 1 budget year	Partially, only for 1 budget year	Partially, only for 1 budget year	Partially, only for 1 budget year	No
<i>Evaluation</i>	2	2	2	2	3
The transfer is distributed according to objective, measurable and transparent criteria and indicators	Partly	Yes	Yes	Yes	No
<i>Evaluation</i>	2	1	1	1	3
Local authorities are involved in the process of determining the size of transfers	Partly	Partly	Partly	Partly	No
<i>Evaluation</i>	2	2	2	2	3
Local authorities are involved in the process of allocating transfers to municipalities	Partly	Partly	Partly	Partly	No
<i>Evaluation</i>	2	2	2	2	3
The law does not introduce additional restrictive conditions for spending transfers	No	Yes	No	Yes	Yes
<i>Evaluation</i>	3	1	3	1	1

REFERENCES

1. Public Finance Act, <https://www.lex.bg/laws/ldoc/2135837967>
2. European Charter of Local Self-Government, Council of Europe Publishing F-67075 Strasbourg Cedex, <http://book.coe.int>, ISBN

978-92-871-6775-0, Council of Europe, March 2010

3. Intergovernmental Fiscal Transfer: A Comparison of Nine Countries (Cases of the United States, Canada, the United Kingdom, Australia, Germany, Japan, Korea, India, and

Indonesia), p.2, Jun Ma, May 1997
https://documents1.worldbank.org/curated/en/406481468771272831/128528322_20041117162103/additional/multi-page.pdf

4. Shah (1995) Shah, Anwar, Theory and Practice of Intergovernmental Transfers. Reforming China's Public Finances, pp. 215-234, 1995, Available at SSRN: <https://ssrn.com/abstract=896507>

i Public Finance Act, <https://www.lex.bg/laws/ldoc/2135837967>

ii European Charter of Local Self-Government, Council of Europe Publishing F-67075 Strasbourg Cedex, <http://book.coe.int>, ISBN 978-92-871-6775-0, Council of Europe, March 2010

iii Intergovernmental Fiscal Transfer: A Comparison of Nine Countries (Cases of the United States, Canada, the United Kingdom, Australia, Germany, Japan, Korea, India, and Indonesia), p.2, Jun Ma, May 1997

https://documents1.worldbank.org/curated/en/406481468771272831/128528322_20041117162103/additional/multi-page.pdf

iv Shah (1995) Shah, Anwar, Theory and Practice of Intergovernmental Transfers. Reforming China's Public Finances, pp. 215-234, 1995, Available at SSRN: <https://ssrn.com/abstract=896507>