

THE FISCAL DEFICIT OF THE REPUBLIC OF SRPSKA IN THE CONTEXT OF FISCAL DECENTRALIZATION

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Abstract: *The paper analyzes the realization of the fiscal deficit in the Republic of Srpska, with a particular focus on the role of fiscal responsibility at different levels of government. Special attention is given to identifying the structure of the deficit across various government levels, including local government units, social security funds, and the central government. The empirical data used in the analysis allow for an assessment of compliance with fiscal rules and the impact that each level of government has on the overall deficit. The study is conducted using a comparative analysis, which enables the evaluation of the influence of different government levels on deficit formation. The research results provide a basis for formulating policies aimed at strengthening fiscal discipline and responsibility. The paper contributes to a deeper understanding of the mechanisms behind fiscal deficit formation and allows for a more precise identification of areas for improving public finance management and ensuring fiscal stability. The findings also offer guidance for developing strategies that can enhance the efficiency of public expenditures and minimize the risks of long-term fiscal imbalances. Overall, the study bridges theoretical approaches with practical implications, facilitating better decision-making in the field of fiscal policy and the maintenance of fiscal stability.*

Key words: *Fiscal deficit, Fiscal decentralization, Fiscal responsibility*

JEL classification: *H50, H60, H72*

1. INTRODUCTION

The fiscal deficit represents one of the key indicators of the state of public finances, but it is also an important factor of macroeconomic stability. In conditions of increased economic uncertainty, often caused by global crises, inflationary pressures, and fiscal shocks, managing the budget deficit gains particular importance. At the same time, processes of fiscal decentralization, which involve the transfer of competencies and financial resources from the central to lower levels of government, further complicate the management of public finances and raise questions about the efficiency and accountability of different institutional levels.

For this reason, it is particularly important to analyze the structure of the fiscal deficit, as well as the role played by different levels of government in its formation. The Republic of Srpska, as an entity with partial decentralization and a dominant role of the central level of government, provides a suitable framework for examining the relationship between the central government, local self-government units, and social security funds in the process of generating the deficit.

The aim of this paper is to analyze the fiscal deficit in the Republic of Srpska, with particular emphasis on the role of fiscal responsibility at different levels of government and the structure of the deficit across these levels, i.e., across subsectors of

general government. The research seeks to determine the extent to which individual levels of government contribute to the overall fiscal deficit, that is, to quantify their individual impact on its size. Special focus is placed on assessing the extent to which each level of government represents a potential risk to fiscal stability.

Based on the above, the paper poses the following research questions: to what extent does fiscal decentralization affect fiscal instability and lead to larger fiscal imbalances, and which institutional level has a dominant influence on deficit formation. Accordingly, appropriate research hypotheses have been formulated that will be tested in the empirical part of the paper, and they are: a higher degree of fiscal decentralization leads to a higher fiscal deficit and a low level of fiscal responsibility increases the contribution of the local level to the deterioration of the consolidated budget result.

There are statistically significant differences in the contribution of individual levels of government to the total fiscal deficit. The central level of government has a dominant share in the total fiscal deficit compared to lower levels of government. However, local self-government units and social security funds show a tendency for deficit growth faster than the central level of government. Levels of government that are not covered by strict fiscal rules generate a higher fiscal risk compared to levels with clearly defined fiscal constraints.

The scientific contribution of the paper is reflected in a detailed analysis of the structure of the fiscal deficit by levels of government in the Republic of Srpska, which allows for a more precise understanding of the mechanisms of its occurrence, especially in conditions of economic uncertainty.

The research results can serve as a basis for amending legal solutions and creating policies aimed at strengthening fiscal discipline, improving coordination between different levels of government and ensuring long-term fiscal stability.

According to the Law on the Budget System of the Republic of Srpska, the budget deficit represents the negative difference between the sum of budget revenues and receipts for non-financial assets and the sum of budget expenditures and expenditures for non-financial assets. Fiscal deficit can also be viewed as a short-term instrument towards establishing fiscal stability. However, the continuous growth of the budget deficit represents an indicator of fiscal imbalance, which can result in the accumulation of public debt, loss of investor confidence and increased macroeconomic instability. The above may ultimately have negative implications for long-term economic

growth, but also lead to the violation of fiscal rules for the entire budget system of the Republic of Srpska.

The Republic of Srpska has a developed legal framework that, according to the Law on Fiscal Responsibility, regulates the provision and maintenance of fiscal responsibility, transparency, medium-term and long-term fiscal sustainability of public finances of the Republic of Srpska. The main instruments for preserving public finances in the Republic of Srpska are fiscal rules, measures and procedures, supervision of their implementation by the Fiscal Council of the Republic of Srpska and controlled temporary deviations in exceptional situations. According to the Law on Fiscal Responsibility in the Republic of Srpska, the consolidated budget deficit is the total deficit of the budget system of the Republic of Srpska, and is determined as the sum of the consolidated budget deficits, the budget of the Republic, the budgets of municipalities and cities and the budgets of funds.

Fiscal responsibility implies the implementation of policies that ensure the sustainability of public finances and the control of budget deficits. The basic instruments are fiscal rules, which can be rules on deficit, public debt or expenditures, as well as certain institutional control mechanisms (Poterba, 1994; Srdić Gojković, 2024). Institutional mechanisms aim to reduce the risk of excessive borrowing and ensure the stability of public finances, especially in conditions of economic uncertainty. Empirical research in the Republic of Srpska and other Western Balkan countries shows that the application of fiscal rules and clear institutional frameworks directly affect the reduction of the deficit and the increase of fiscal discipline (Srdić Gojković, 2022; 2025), but also the constant control of deficit and public debt movements through the institutional application of fiscal rules. The fiscal deficit is a central topic of public finance and macroeconomic policy. Theoretical assumptions about the deficit and the role of the state in the economy can be found in Richard Musgrave, who particularly emphasizes the role of the state in stabilizing the economy and allocating resources (Musgrave, 1959). Some analyses conducted in Spain, relating to the local level (Cifuentes-Faura, J., Simionescu, M. & Gavurova, B., 2022) confirm that deficit and debt control remains a complex problem, although through the analysis of various revenue and expenditure items it is possible to reliably determine budgetary stability, the origin of revenue and sources of financing (Ferraresi et al., 2018; Alexandre et al., 2021).

In the context of transition countries, empirical research shows that fiscal deficits often stem from

institutional weaknesses, insufficient transparency, and limited fiscal discipline. In this context, the works of Srdić Gojković (2022, 2024, 2025) provide relevant empirical insights into the fiscal stability of Republic of Srpska and the Western Balkan countries, emphasizing the importance of a strong institutional foundation and the implementation of fiscal rules at the local level for preserving the stability of public finances. In this context, it is very important to consider the role of all budget users in the deficit and the impact on the fiscal stability of Republic of Srpska.

Excessive fiscal deficits are one of the root causes of the debt crisis. The management and control of public deficits has a huge impact on the financial, economic and political integration of a country, so those governments with excessive public deficits must establish fiscal rules to ensure the sustainability of budgets and public finances (Maltritz and Wüste, 2015).

Continued deficits lead to an increase in public debt, which may threaten the ability of public budgets to act as a countercyclical mechanism for stabilizing the economy (Correia et al., 2008).

Understanding the determinants of fiscal deficits is important given that persistent deficits quickly lead to the accumulation of public debt, especially in low- and middle-income countries (World Bank-IMF, 2018).

The long-term sustainability of public finances may be at risk depending on whether the resulting imbalance is financed by borrowing or by reducing planned public investments (Cifuentes-Faura et al., 2022). In order to remediate a high level of deficit, the government often borrows, which poses an additional risk in the form of violating the fiscal debt rule. It has been proven that the realized deficit of local government units (hereafter: LGU) of the Republic of Srpska is mainly covered by credit borrowing of LGUs (Gojković B., Popović S., Đukić M., 2024).

In addition to jeopardizing the fiscal deficit rule, servicing the deficit through borrowing also tends to jeopardize the fiscal debt rule. Since responsible fiscal management has multiple positive effects on the fiscal stability of local governments of the Republic of Srpska, it is necessary to conduct an adequate borrowing policy through responsible and fiscal management (Srdić Gojković, 2024).

There is a relatively small number of papers that analyses the structure of the fiscal deficit and the impact of individual levels of government on the overall level of the deficit. More precisely, there is limited research on the impact of the deficit structure on the fiscal stability of the country. With this paper, we contribute to the limited literature

on the previously mentioned deficit structure. In addition, our findings are very important from the aspect of the need for corrections of legal solutions and their implementation in the process of establishing fiscal stability, both at the local level and the level of the social security funds, as well as in the entire budget system of the Republic of Srpska.

When it comes to fiscal decentralization, the fundamental contribution is made by Wallace Oates through the theory of fiscal federalism, which emphasizes that decentralization can lead to a more efficient allocation of resources because local governments better understand the needs of the population (Oates, 1972). However, this approach also points to potential risks, especially in conditions of insufficiently developed institutions. The papers by Rodden (2002) and Stein et al. (2007) point to the possibility of increasing the fiscal deficit due to “soft budget constraints” when local levels of government expect assistance from the central level. Therefore, the method of budget planning in local government units is very important. More precisely, more realistic budget planning based on the dominant source revenues of local government units.

In the field of fiscal responsibility and fiscal rules, significant contributions are made by the works of Poterba (1994) and Alesina & Perotti (1995), who emphasize the role of institutional constraints and political cycles in the formation of fiscal policy. Domestic research, such as the work of Srdić Gojković (2024), shows that the application of fiscal rules at the local level would significantly affect the control of budget deficits and the improvement of fiscal discipline, which is crucial for countries in transition. In our case, the application of fiscal rules in local government units would significantly increase fiscal responsibility and largely contribute to fiscal stability at the level for the entire budget system.

Balanced public finances and a sustainable level of public debt are a conditions for economic growth, as well as a good premise for easier overcoming of economic shocks, i.e. crisis periods in the cyclical movement of the economy (Krajišnik, Gligorić & Gojković, 2019).

Despite numerous works on fiscal deficit, decentralization and fiscal responsibility, there is a lack of research that comprehensively analyzes the structure of the deficit by level of government, especially in the Republic of Srpska. This research gap forms the basis of this work, which aims to provide a more comprehensive analysis and better understanding of public finance management in conditions of economic uncertainty, with a special

focus on the impact of budget users on the deficit and public debt growth.

2. METHODOLOGY

The aim of this research is to analyze the fiscal deficit of the entire budget system in the Republic of Srpska, with a special focus on the structure of the deficit by subsectors of the general government, and its level in the context of fiscal decentralization. Special focus is placed on assessing the extent to which each level of government represents a potential risk to the fiscal stability of the Republic of Srpska. The research is of particular importance in the context of ensuring consistent compliance with fiscal rules at the level of the entire budget system of the Republic of Srpska. The results obtained can provide additional analytical insights to decision-makers in the field of public finance, especially in the field of improving fiscal discipline and accountability and amending legal solutions.

The time scope of the research refers to the period from 2014 to 2024, with the empirical basis being data from the Ministry of Finance of the Republic of Srpska and the Republic Institute of Statistics of the Republic of Srpska. In order to identify similarities and differences in the structure of public revenues and expenditures between different levels of government, as well as to assess the relative importance of individual categories within the subsectors of the general government, the comparative analysis method is applied. The comparison is based on the analysis of the dominant types of revenues and expenditures of each general government subsector in the total revenues/expenditures of the general government of the Republic of Srpska, as well as on a comparative analysis of the level of the realized budget deficit by general government subsectors.

For the quantitative assessment of the impact of the deficit of local government units on the total budget result of the budget system of the Republic of Srpska, a simple linear regression analysis will be applied. In this model, the dependent variable is the budget result defined as the consolidated budget result of the entire system of the Republic of Srpska, while the independent variable is the deficit of the local government subsector, i.e. the deficit of local government units. The econometric analysis will be conducted using the Ordinary Least Squares (OLS) method in the EViews software package.

3. THE FISCAL DEFICIT OF THE REPUBLIC OF SRPSKA IN THE CONTEXT OF FISCAL DECENTRALIZATION

Fiscal decentralization is the process of transferring fiscal responsibilities from the central level of government to lower levels of government, primarily local government units (LGUs). This concept implies an increase in the role of local governments in collecting public revenues and implementing public expenditures, thereby seeking to improve the efficiency of public service delivery, increase accountability in the management of public funds, and bring fiscal decisions closer to the needs of the local population. The degree of fiscal decentralization in a country is most often observed through the participation of the local sector in total public finances, i.e. within the general government sector.

The general government sector in the Republic of Srpska consists of sub-sectors: central government (which covers the entire territory of the Republic of Srpska), local government (which covers the territory of local self-government units) and social security funds. The central level of government that includes ministries, agencies and institutions that lead and coordinate policy at the state level and is responsible for budgeting, fiscal policy and public expenditure control. Local self-government units, specifically cities and municipalities, which have the authority to manage local revenues and expenditures, including local and economic development, communal and social services, and more. Social security funds include Pension and Disability Insurance Fund of the Republic of Srpska, Health Insurance Fund of the Republic of Srpska, Public Fund for Child Protection of the Republic of Srpska and Employment Institute of the Republic of Srpska. They have a special status as extra-budgetary institutions and significantly influence the overall fiscal deficit and public debt. Since 2016, due to chronic deficits, and in order to ensure regular payment of pensions, the Pension and Disability Insurance Fund of the Republic of Srpska has been included in the central level of government.

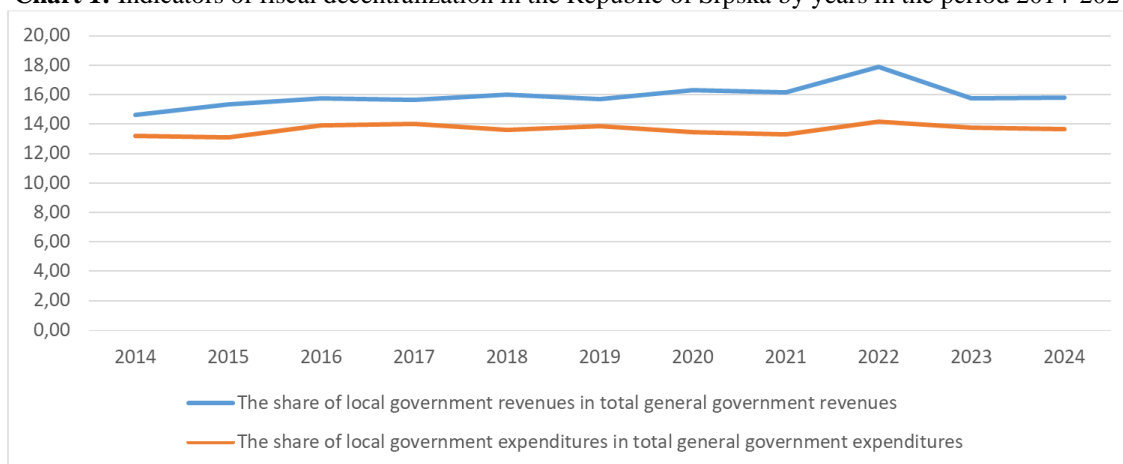
Financial and functional decentralization in the Republic of Srpska is regulated by law and implies clearly defined responsibilities in the overall budget system. The central level has jurisdiction over strategic budget issues and transfers, while local self-government units manage revenues from local taxes and fees with the corresponding revenues based on the distribution from the republican level. This division aims to enable efficient allocation of resources and locally

tailored public services, but also poses a challenge for coordination and control of the fiscal deficit.

The financial organization of social security funds in the Republic of Srpska is regulated by special regulations and implies centralization of collection and distribution of funds within extra-budgetary funds. Funds, such as the Health Insurance Fund of the Republic of Srpska, the Public Fund for Child Protection of the Republic of Srpska and the Employment Agency of the Republic of Srpska, manage revenues from contributions and other sources of financing, and ensure the exercise of rights in the areas of health insurance, child

protection and the labor market. Although they operate as separate institutions, their operations are significantly linked to the budget system, especially in conditions of chronic deficits and the need for budget transfers. Such an organization aims to ensure the stability of social benefits, but at the same time poses challenges in terms of long-term fiscal sustainability and the impact on the overall budget framework. Unlike local government units, social security funds are characterized by a high degree of centralization, combining elements of fiscal decentralization and centralized financing of social functions.

Chart 1: Indicators of fiscal decentralization in the Republic of Srpska by years in the period 2014-2024



Source: Author's analysis based on data from the Ministry of Finance of the Republic of Srpska

Although there is no single classification of the level of fiscal decentralization in theory, empirical research by international institutions indicates that countries with a share of local expenditures and revenues below 10% are considered highly centralized, while values between 10% and 20% indicate a low to moderate level of decentralization (OECD, 2024; IMF, 2011). Values above 20% are characteristic of more developed and fiscally decentralized systems.

The measurement of fiscal decentralization in empirical analyses is most often done using indicators based on the relative shares of local government revenues and expenditures in total general government revenues and expenditures. This provides insight into the fiscal position of local governments within the broader public sector, as well as their actual financial autonomy. The level of fiscal decentralization can be monitored by analyzing some conventional indicators of fiscal decentralization: the share of revenues and expenditures of cities and municipalities in total general government revenues and expenditures or as a percentage of GDP (World Bank, 2021).

The following graph illustrates the share of revenues and expenditures of local government units within the general government sector of the Republic of Srpska by year in the period 2014-2024. Based on the presented trends, it is possible to see the intensity of fiscal decentralization, as well as possible structural changes in relations between the central and local levels of government in the observed period.

Based on the share of revenues and expenditures of local government units in total public finances, it can be concluded that the Republic of Srpska has a low to moderate level of fiscal decentralization, which is in line with the characteristics of developing countries and transition economies.

In the case of Republic of Srpska, fiscal decentralization has specific characteristics that arise from the institutional and economic framework of Bosnia and Herzegovina as a complex state. Namely, although there is a formal division of responsibilities between the entity and local levels, empirical indicators indicate that the level of fiscal decentralization is limited and stable, which is confirmed by the relatively low

share of revenues and expenditures of local self-government units in total public finances. Such a structure indicates the dominant role of the republican level of government in collecting and distributing public funds, while local governments have a narrow fiscal capacity and significant dependence on transfers. In addition, the specificity of the system in Republic of Srpska is also reflected in the fact that a significant part of public revenues comes from indirect taxes that are collected at the level of Bosnia and Herzegovina and then redistributed to the entities, which further affects the limited fiscal autonomy of lower levels of government. At the same time, the relatively stable share of local revenues in total public revenues without significant oscillations indicates the absence of deeper reforms aimed at strengthening decentralization, but also the existence of a controlled fiscal system in which the central level retains key fiscal policy instruments. In such a context, fiscal decentralization in the Republic of Srpska can be characterized as

moderate, functionally limited and predominantly transfer-dependent, which may have direct

implications for the fiscal stability of local governments.

In order to have a more comprehensive view of the degree of fiscal decentralization, it is necessary to analyze the structure of revenues and expenditures by subsectors of general government. Such an analysis provides insight into the distribution of fiscal responsibilities between the central government, local government units and social security funds, and provides a basis for assessing the actual level of financial autonomy of lower levels of government. In addition to the above, the structure of revenues will show the key sources of financing, while the analysis of the structure of expenditures, viewed through economic classification, will indicate the purpose and efficiency of the use of funds. The table below provides an overview of the structure of revenues and expenditures by subsectors of general government of the Republic of Srpska in 2024, which allows for a more detailed analysis of the relationship between different levels of government.

Table 1: Revenue structure by general government subsectors of the Republic of Srpska, in 2024

Description	Central Government		Share of Central Government in the General Government Sector (%)	Local Government		Share of Local Government in the General Government Sector (%)	Social Security Funds		Share of Social Security Funds in the General Government Sector (%)
	In millions of BAM	Share in Revenues (%)		In millions of BAM	Share in Revenues (%)		In millions of BAM	Share in Revenues (%)	
REVENUES	5.018,2	100,00	67,88	1.116,8	100	15,11	1.257,8	100,00	17,01
I TAX REVENUES	4.586,9	91,40	72,26	709,9	63,6	11,18	1.051,1	83,56	1,32
Personal Income and Corporate Profit Taxes	501,7	10,00	100,00	-	-	-	-	-	-
Social Security Contributions	1.543,9	30,77	59,50	-	-	-	1.051,1	83,56	40,50
Taxes on Personal Earnings and Self-employment Income	263,2	5,24	73,58	94,5	8,5	26,42	-	-	-
Property Taxes	20,1	0,40	35,77	36,1	3,2	64,23	-	-	-
Turnover tax on goods and services	0,2	0,00	66,67	0,1	0,0	33,33	-	-	-
Indirect tax revenue	2.257,7	44,99	80,23	556,4	49,8	19,77	-	-	-
Other Tax Revenues	-	-	-	22,8	2,0	100,00	-	-	-
II NON-TAX REVENUES	386,2	7,70	58,19	273,8	24,5	41,25	3,7	0,30	0,56
Revenues from Financial and Non-financial Assets and Positive Exchange Rate Differences	41,1	0,82	51,38	37,3	3,3	46,63	1,6	0,13	2,00
Fees, Charges and Revenues from Public Services	302,2	6,02	56,83	229,6	20,6	43,17	-	-	-
Fines	36,1	0,72	95,76	1,6	0,1	4,24	-	-	-
Revenues from Financial and Non-	2,78	0,06	92,67	0,2	0,0	6,67	0,02	0,00	0,67

financial Assets and Intergovernmental Transactions									
Other Non-tax Revenues	4,0	0,08	35,71	5,1	0,5	45,54	2,1	0,17	18,75
III GRANTS	41,11	0,82	60,49	26,8	2,4	39,43	0,05	0,00	0,07
IV TRANSFERS BETWEEN OR WITHIN LEVELS OF GOVERNMENT	4,0	0,08	1,28	106,4	9,5	33,95	203,0	16,14	64,77

Source: Author's analysis based on data from the Ministry of Finance of the Republic of Srpska

The analysis of the revenue structure shows that there are significant differences between the subsectors of general government, both by level and by revenue structure. The central level of government has nearly 70% of total revenues, which confirms a relatively high degree of fiscal centralization. While the revenues of local self-government units account for about 15%, the revenues of social security funds account for about 17% of total general government revenues. Tax revenues are the dominant source of financing in all subsectors. The share of local government tax revenues in total tax revenues of the general government sector is only about 11%, which indicates a limited fiscal capacity of the local level. Indirect taxes account for a significant part of total and tax revenues of the central and local levels of government. The importance of indirect taxes in

the revenue structure is particularly pronounced for local governments, since they account for nearly 50% of total local government revenues and nearly 80% of local government tax revenues on average. The funds are almost entirely dependent on contributions (about 84%). Non-tax revenues are relatively significant for local governments (around 25%), which makes local government financing uncertain since revenues from this source are less certain. Also, the analysis of the revenue structure shows that transfers are relatively more significant in financing local governments and social security funds. Overall, the analysis of the revenue structure shows that local governments have limited fiscal autonomy and are significantly dependent on transfers and non-tax revenues, while the funds are almost entirely dependent on revenue from contributions.

Table 2: Structure of expenditures by general government subsectors of the Republic of Srpska, in 2024

Description	Central Government		Share of Central Government in the General Government Sector (%)	Local Government		Share of Local Government in the General Government Sector (%)	Social Security Funds		Share of Social Security Funds in the General Government Sector (%)
	In millions of BAM	Share in Expenditures (%)		In millions of BAM	Share in Expenditures (%)		In millions of BAM	Share in Expenditures (%)	
EXPENDITURES	5.019,5	100,00	70,68	925,4	100,00	13,03	1.157,3	100,00	16,29
I CURRENT EXPENDITURES	4.708,5	93,81	69,42	917,2	99,11	13,52	1.156,9	99,96	17,06
Compensation of Employees	1.182,5	23,56	73,61	383,8	41,47	23,89	40,1	3,46	2,50
Use of Goods and Services	289,1	5,76	58,39	196,9	21,28	39,77	9,1	0,79	1,84
Interest Payments and Other Financial Costs	240,2	4,78	88,15	21,2	2,29	7,78	11,1	0,95	4,07
Subsidies	275,8	5,49	87,44	34,7	3,75	11,00	4,9	0,42	1,55
Grants	402,9	8,03	79,20	105,8	11,44	20,80	-	-	-
Social Benefits Paid from the Budgets of the Republic, Municipalities and Cities	514,4	10,25	75,43	167,6	18,11	24,57	-	-	-
Social protection benefits paid by compulsory social security institutions	1.796,3	35,79	62,22	-	-	-	1.090,9	94,26	37,78
Financing expenditures, other financial costs and expenditures	0,1	-	3,03	3,2	0,34	96,97	-	-	-

from intergovernmental transactions									
Expenditures Based on Court Decisions	7,2	0,14	60,00	4,0	0,43	33,33	0,8	0,07	6,67
II TRANSFERS BETWEEN AND WITHIN LEVELS OF GOVERNMENT									
	310,9	6,19	97,31	8,2	0,89	2,57	0,4	0,04	0,13

Source: Author's analysis based on data from the Ministry of Finance of the Republic of Srpska

The analysis of the structure of general government expenditures clearly indicates the dominant role of the central level of government and the limited fiscal capacity of lower levels, which confirms the existence of pronounced fiscal centralization in the system. Namely, nearly 71% of the total general government expenditures is realized by the central government, while local self-government units participate with only around 13%, and funds with around 16%, which implies that key fiscal decisions and control over public spending remain concentrated at the central level. The structure of expenditures shows the dominance of current spending at all levels. The functional distribution of expenditures indicates that the local level plays a significant role in the provision of public services, which is reflected in the high share of expenditures for wages (41,47%) and expenditures for goods and services (21,28%) in total sector expenditures, while the central government retains key functions in the area of subsidies, grants and transfers. The funds direct almost all funds to social transfers (94,26%),

thereby taking over the main function of social protection and contributing to a specific form of functional decentralization. However, the presence of significant transfers between levels of government, especially from the central to the local level, indicates a pronounced vertical fiscal imbalance and the dependence of local budgets on higher levels of government.

After analyzing fiscal decentralization, as well as the structure of revenues and expenditures by different levels of government, it is necessary to consider how such an institutional and fiscal structure is reflected in the budget result. In this context, the following table shows the structure of the budget result by subsectors of the general government of the Republic of Srpska, providing insight into the individual contributions of these subsectors to the overall fiscal balance. At the same time, taking into account the significant impact of economic activity trends on fiscal performance, the table also shows the real growth rates of the gross domestic product (GDP) of the Republic of Srpska.

Table 3: Real GDP growth rates and budget results by general government subsectors of the Republic of Srpska

Year	GDP, growth rates, in %	Budget result of Republic, in millions of BAM	Deficit of LGU, in millions of BAM	Deficit of social security fund, in millions of BAM	Total consolidated budget surplus/deficit, in millions of BAM	Total consolidated budget surplus/deficit, % GDP
2014	0,30	-192,06	-24,82	-45,01	-253,36	-2,84
2015	2,80	17,55	-8,47	-75,06	-52,54	-0,57
2016	3,50	-45,62	-30,68	-39,39	-109,73	-1,14
2017	3,10	135,89	-15,81	-4,47	106,04	1,05
2018	3,90	-45,32	-24,10	0,00	-65,86	-0,62
2019	2,50	1,95	-33,89	0,00	-32,24	-0,29
2020	-2,50	-521,08	-97,00	-15,58	-635,84	-5,71
2021	6,90	-74,77	-13,61	-8,45	-102,95	-0,82
2022	3,90	-416,39	-28,58	-21,56	-466,86	-3,21
2023	1,90	-320,54	-42,15	-8,90	-390,88	-2,43
2024	3,10	-197,36	-69,15	-59,78	-322,97	-1,88

Source: Author's analysis based on data from the Ministry of Finance of the Republic of Srpska

The fiscal deficit of the Republic of Srpska has varied depending on economic cycles and external shocks. Particularly significant are periods of

crisis, such as the global financial crisis of 2008–2009 and the economic uncertainty during the COVID-19 pandemic, which led to a temporary

increase in the deficit due to increased public expenditures and reduced revenues. In our analyzed period, fiscal discipline and the application of rules in these periods play an important role in limiting the growing deficit. And why this is important is shown in the previous table.

The GDP trend of the Republic of Srpska in the observed period reflects a typical cyclical pattern: a phase of stable growth, a sharp decline due to an exogenous shock, a strong recovery, and then a phase of moderate and stable growth. Analysis of the budget result in the observed period indicates a strong connection with cyclical GDP trends, although this connection is not entirely linear or unidirectional.

In 2017, the Republic achieved its highest budget surplus, which can be attributed to stable and positive economic growth during that period. GDP growth contributes to increased tax revenues and reduced need for intervention fiscal spending, thus creating space for achieving a budget surplus. This is in line with the concept of automatic stabilizers, where the fiscal balance improves during phases of economic expansion. The largest budget deficit related to the Republic was recorded in 2020, which coincides with the decline in GDP caused by the COVID-19 pandemic. This trend is expected from the perspective of fiscal theory, since the economic downturn leads to a decrease in public revenues, due to lower economic activity, employment and consumption, with a simultaneous increase in public expenditures, due to measures to support the economy and the population. This leads to a deepening of the fiscal deficit, which confirms the existence of a strong pro-cyclical sensitivity of public finances to negative economic shocks. However, after 2020, despite the recovery in GDP (particularly pronounced in 2021), the deficit remains relatively high. This indicates that the fiscal balance does not respond exclusively to current GDP developments, but also to other factors. First of all, prolonged fiscal support measures, increased public expenditure and possible rigidity in budget spending may slow down the ongoing fiscal consolidation process. Also, the recovery of revenues may lag behind GDP growth, especially if the structure of growth is such that it does not generate a proportional increase in the tax base.

Given the above, it can be concluded that there is a clear connection between GDP developments and the budget balance, especially in crisis periods, but that this connection is mediated by institutional, structural and often political factors. While a decline in GDP almost immediately leads to a deterioration in the fiscal position, a recovery in economic activity does not necessarily

automatically result in a rapid reduction in the deficit, which is evident in the post-pandemic period.

The analysis of the deficit trends of social security funds indicates a pronounced variability over the observed period, with alternating phases of fiscal imbalance and temporary balancing. In the period from 2014 to 2017, a significant level of deficit was present, indicating a structural mismatch between revenues and expenditures. This pattern suggests the existence of long-term fiscal pressures, which are characteristic of social security systems, especially in conditions of unfavorable demographic trends and limited contribution revenues. During 2018 and 2019, a temporary balancing occurred, which may be the result of a combination of more favorable macroeconomic trends and possible reform or administrative measures. However, since 2020, the deficit has reappeared and shows a tendency to grow. This renewed growth can be associated with increased expenditures in the context of the crisis caused by the COVID-19 pandemic, but also with the continued structural weaknesses of the social security system, which are manifested through a permanent gap between revenues and liabilities. Therefore, it can be concluded that the deficit of social security funds, although not a dominant source of fiscal imbalance, has a significant cumulative effect, and in combination with the deficit of the Republic and local governments, it can contribute to exceeding the fiscal rule and threaten fiscal sustainability in the medium term, but not as much as the local government deficit.

The analysis of the fiscal position of local government units indicates that their deficits are, as a rule, significantly lower than the deficit of the central government (the Republic). However, although they are nominally smaller, these deficits play an important role in the overall fiscal picture, especially in the context of compliance with the fiscal rule that limits the consolidated deficit to 3% of GDP. The largest LGU deficit after 2020 was also recorded in 2024, which indicates an increase in fiscal pressure on the local government level. At the same time, the level of the Republic's deficit has decreased. In 2024, 38 LGUs achieved a deficit as a budget result, which is 9 LGUs more than in 2023. This trend may be the result of increased expenditures for utility infrastructure, social services, weaker growth of own revenues, but also irresponsible fiscal management. Although individually observed, the LGU deficit does not represent a dominant component of the overall deficit, its importance is evident within the overall consolidated budget framework and as such represents a risk to the fiscal stability of the Republic of Srpska.

The fiscal rule which defines that the level of the consolidated budget deficit cannot exceed 3% of GDP refers to the total deficit of the general government sector, which includes the deficit of the Republic, the deficit of local governments and the deficit of social security funds. In this sense, the local government deficit represents an additional fiscal risk, because together with the deficit of the Republic and other funds, it can contribute to exceeding the defined deficit threshold. Although the deficit achieved at the level of the Republic has a dominant impact on the total deficit, an increase in the deficit at the local level, as is the case in 2024, may further worsen the overall fiscal position. In other words, even if the deficit of the Republic stabilizes, as is the case in the last observed years, an increase in the local government deficit may make it more difficult to meet the fiscal rule. The analysis shows that the local government deficit, although smaller in size, has a significant indirect impact on fiscal sustainability, because in interaction with the deficit of the Republic and social security funds, it

largely determines whether the overall fiscal framework will remain within the limits defined by the fiscal rules.

Starting from the assumption that a low level of fiscal responsibility can increase the contribution of the local level to the overall fiscal deficit, the paper examines this relationship using regression analysis. The basic idea is to quantify the extent to which the movement of the local government deficit affects changes in the overall consolidated budget result, and whether there is a statistically significant relationship between these variables. In this sense, regression analysis allows testing the hypothesis that weaker fiscal discipline at the local level, which manifests itself through the growth of the budget deficit, can have a direct and measurable impact on overall fiscal stability. In this way, the importance of the local level of government in the formation of the overall deficit is empirically assessed, which further deepens the analysis of the relationship between fiscal decentralization and fiscal responsibility

Figure 1: Results of the regression analysis

Dependent Variable: BUDZ_REZULTAT
Method: Least Squares
Date: 04/20/26 Time: 11:52
Sample: 2014 2024
Included observations: 11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.225003	0.657199	0.342367	0.7399
DEFICIT_JLS	6.517233	1.846650	3.529218	0.0064
R-squared	0.580525	Mean dependent var		-1.678182
Adjusted R-squared	0.533916	S.D. dependent var		1.824877
S.E. of regression	1.245849	Akaike info criterion		3.440478
Sum squared resid	13.96926	Schwarz criterion		3.512822
Log likelihood	-16.92263	Hannan-Quinn criter.		3.394874
F-statistic	12.45538	Durbin-Watson stat		1.088738
Prob(F-statistic)	0.006422			

Source: Author's analysis view generated in Eviews

The results of the regression analysis indicate the existence of a statistically significant relationship between the deficit of local government units and the total consolidated budget deficit. The estimated coefficient with the variable of the deficit of local governments is 6,51, which implies that an increase in the deficit at the local level leads to a deterioration in the consolidated budget result of the entire budget system of the Republic of Srpska. This relationship is statistically significant at the 5% level ($p < 0,05$), which confirms the reliability of the obtained results. The coefficient of determination ($R^2 = 0,58$) indicates that

approximately 58% of the variation in the total deficit can be explained by changes in the deficit of local government units. The obtained results confirm the hypothesis that the fiscal behavior of the local level has a significant impact on the overall fiscal stability, and that the growth of their deficit represents a relevant fiscal risk.

The obtained results can be further interpreted in the broader context of fiscal (de)centralization, which represents an important institutional framework in which the fiscal deficit is formed. Namely, the impact of the deficit of local self-

government units on the overall deficit largely depends on the degree of fiscal autonomy and responsibility assigned to the local level of government. In conditions of low fiscal decentralization, as is the case in the Republic of Srpska, local units have relatively limited fiscal capacity, while at the same time a significant part of their revenues depend on transfers from higher levels of government. Such a structure can partially limit their direct impact on the overall deficit, but at the same time creates the risk of the so-called "soft budget constraint", where local authorities do not have a sufficiently strong incentive for fiscal discipline, because they expect support from the central level in the event of fiscal imbalances.

On the other hand, a higher degree of fiscal decentralization, if not accompanied by adequate institutional control mechanisms and clearly defined fiscal rules, can lead to an increase in local deficits, and thus to an increase in the overall fiscal deficit. However, theoretical and empirical literature indicates that decentralization in itself is not necessarily the cause of fiscal instability, but that its effect depends on the quality of fiscal institutions, the degree of transparency and accountability at all levels of government. In this sense, the results of this research suggest that the key problem does not stem from the level of decentralization itself, but from insufficient fiscal discipline and the absence of strict fiscal rules at the local level. Therefore, it can be concluded that, although the contribution of local self-government units to the overall deficit is relatively limited in quantitative terms, their impact becomes significant in the institutional context, especially in conditions of insufficiently developed fiscal accountability mechanisms, which further emphasizes the need for improving fiscal policy coordination and introducing clear fiscal constraints at all levels of government. Accordingly, improving fiscal stability requires strengthening institutional control mechanisms, improving transparency and, above all, introducing clear and binding fiscal rules at the local level of government. Such an approach would enable not only better control of local budgets, but also more efficient coordination of fiscal policy between different levels of government, which is crucial for preserving the overall fiscal stability of the Republic of Srpska.

CONCLUSION

The fiscal system of the Republic of Srpska is characterized by pronounced fluctuations, especially in crisis periods (2020–2024). Although the gross domestic product recovers after 2021, the consolidated deficit remains significant and unstable, indicating that economic growth in itself

is not a sufficient condition for stabilizing public finances. The overall fiscal pressure results from the combined action of the central government, local government units (LGUs) and social security funds, with the central level retaining a dominant share, but with the growing importance of lower levels of government.

The analysis indicates different patterns of deficit movements between levels of government. The deficit of the Republic is characterized by pronounced cyclical oscillations, with strong reactions to external shocks and slower adjustment in subsequent periods. In contrast, the LGU deficit shows a gradual but continuous upward trend, especially after 2020, culminating in 2024. This pattern indicates a permanent accumulation of fiscal pressure at the local level, conditioned primarily by structural and institutional factors.

Although nominally smaller, the continued deficit of local governments represents a relevant fiscal risk, especially in interaction with the deficits of the central level and social security funds, because it reduces the available fiscal space and increases the likelihood of exceeding the deficit reference limit of 3% of GDP. The results of the empirical analysis confirm the existence of a statistically significant relationship between the local government deficit and the total consolidated deficit, thus confirming the hypothesis of a significant impact of the fiscal behavior of the local level on overall fiscal stability. The findings also indicate that the insufficient level of fiscal responsibility and the absence of formal fiscal rules at the local level contribute to the growth of fiscal imbalances.

In this context, the introduction of fiscal rules for local governments is imposed as a key instrument for strengthening fiscal discipline, improving fiscal policy coordination between levels of government and ensuring the long-term sustainability of public finances.

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