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FISCAL STABILITY OF THE LOCAL GOVERNMENT UNITS IN THE REPUBLIC OF SRPSKA

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Review paper

Abstract: Fiscal stability of the local self-government units is the condition for stable public finances of the Republic of Srpska (hereinafter: RS) as a whole. Stable public finances of local self-government units have a positive impact on the economic growth of the RS. Therefore, it is necessary to pay a significant attention to the fiscal problems of local self-government units (hereinafter: LGUs). Although the public finances of the LGUs make up 15% of the total public finances of the Republic of Srpska, it is important to emphasize that the life of the RS citizens takes place in the local self-government. In this regard, LGUs have the important role in providing public goods and services, as well as creating the environment for the life of citizens on the basis of legally defined competencies. Having in mind the importance and role of local self-government units in the RS, it is necessary to ensure the efficient management and stability of their public finances. One of the preconditions for the successful exercise of the competencies of LGUs is the rational and efficient use of available resources. The aim of this paper is to examine the impact of the key fiscal factors of local self-government units on their fiscal stability. The results of this analysis will provide answers to the question of how rational and efficient local self-government units are in the execution of their competencies and how it is reflected on their revenues and expenditures, i.e. in total public finances of RS.

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1. Introduction

The budget system of the RS consists of the budget of the Republic, budgets of municipalities and cities, and budgets of funds. Since local governments[1] form one part of the overall public finances of the RS, they have an important role to play in maintaining the fiscal stability and accountability in the Republic of Srpska as a whole. Therefore, it is necessary to pay a special attention to the public finances of the local self-government units of the RS.

The position, competencies and responsibilities of the local self-government units of the RS are regulated by the Constitution of the Republic of Srpska, the Law on Local Self-Government, and special laws that regulate the competencies of the local self-government units in other areas.

The territory of Republic of Srpska consists of 64 local self-government units, of which 56 are municipalities and 8 cities[2]. The local self-government units are divided according to the level of development: developed, moderately developed, underdeveloped and extremely underdeveloped.

The local self-government unit with the largest number of inhabitants is the City of Banja Luka, the largest political-territorial unit of the Republic of Srpska - 16.05% of the total population of RS lives in Banja Luka. Istočni Drvar is the LGU with the lowest number of inhabitants (65 inhabitants). Most LGUs are facing the decrease in the number of inhabitants in 2018, in relation to the number of inhabitants according to the 2013 Census, except for the cities of Banja Luka, Istočno Sarajevo, Bijeljina, Trebinje, and the municipality of Laktaši. Observing the population of LGUs, the uneven population and the high concentration of population in several urban centres is evident.

Out of the total number of employees, in 2018, 26.21% worked in Banja Luka, which is the LGU with the highest percentage share of employees in the total number of employees in the territory of the Republic of Srpska. The average net salary in the RS for 2018 was 857 KM. The highest average salary was 1,210 KM

[1] According to the Law on Local Self-Government, the local self-government units in the Republic of Srpska are cities or municipalities.

[2] Municipalities in the Republic of Srpska are: Bileća, Berkovići, Bratunac, Brod, Višegrad, Vlasenica, Vukosavlje, Gacko, Derventa, Donji Žabar, Istočni Mostar, Istočni Drvar, Istočna Ilidža, Istočno Novo Sarajevo, Istočni Stari Grad, Jezero, Kalinovik, Kneževo, Kozarska Dubica, Kostajnica, Kotor Varos, Krupa na Uni, Kupres, Laktaši, Lopare, Ljubinje, Milići, Modriča, Mrkonjić Grad, Nevesinje, Novi Grad, Novo Goražde, Osmaci, Oštra Luka, Pale, Pelagićevo, Petrovac, Petrovo, Prnjavor, Rogatica, Rudo, Ribnik, Srbac, Srebrenica, Sokolac, Stanari, Teslić, Trnovo, Ugljevik, Foča, Han Pijesak, Cajnice, Celinac, Samac, Sekovići and Šipovo.
The cities in the Republic of Srpska are Banja Luka, Bijeljina, Gradiška, Doboj, Zvornik, Prijedor and Trebinje, which do not have municipalities, and the City of Istočno Sarajevo, which is the only city in the Republic of Srpska that has municipalities. Namely, the area of the City of Istočno Sarajevo consists of the municipalities: Istočna Ilidža, Istočni Stari Grad, Istočno Novo Sarajevo, Pale, Sokolac and Trnovo.

in the municipality Stanari (about 41% more than the average of the RS), while the lowest average net salary was realized in Kupres and amounted to 535 KM (about 62% of the average salary in the RS). About 55% of business entities out of the total number of business entities in the RS are registered in the cities. The relatively larger number of business entities, except in the cities, is registered in the municipalities: Derventa, Laktaši, Prnjavor and Teslić.

Relative indicators of the RS's local self-government units in relation to the number of inhabitants, employees and business entities have shown that the most dynamic economic activity takes place in three urban centers: Banja Luka, Istočno Sarajevo and Trebinje, and partly in municipalities Bijeljina and Laktaši. These LGUs have the greatest potential for generating tax revenues, primarily income taxes. Also, they belong to the group of developed local self-government units and have a relatively large number of inhabitants. The LGU group, which has between 15,000 and 50,000 inhabitants, is characterized by the high level of employment and significant potential for generating income tax revenues, primarily from personal income taxes.

Local self-government units in the Republic of Srpska differ significantly according to general indicators, and thus according to the potential for generating public revenues. It could be reasonably expected that there are differences between the local self-government units in terms of the state of local public finances, i.e. in the execution of the budgets of municipalities and cities, and their indebtedness.

2. Literature review

Although the local level of government is an extremely important part of the overall public sector, the analysis of the state of public finances of the local self-government units has not been given enough attention. The literature investigating the fiscal stability of the local government is not extensive.

Contrary to the widespread belief in the importance of local government in providing public services to any national economy, there is very little research on the state of public finances at the local government level. Interstate comparative studies dealing with this topic are particularly rare. One of the analyses dealing with local public finances in several countries, more precisely on the example of Germany, Switzerland, Poland and the United Kingdom, showed that differences in the system of government do not play the crucial role for public finances of local governments (Friedrich et al. 2003). Among others, the analysis for 23 European countries provided the general overview of national local public finance systems showing some structural characteristics rather than analysing the state of public finances of each country individually in detail (Geißler et al. 2019).

Some studies deal with measuring and forecasting financial and fiscal problems at different state levels in terms of financial condition and fiscal stability, including the local level (Tkacova & Konecny, 2017; Adrian et al. 2015).

Many studies (Eichengreen & Bayoumi (1994), Kirchgussner (2002), von Hagen & Wolff (2006), Debrun et al. (2008), Beetsma et al. (2009), Luechinger & Schaltegger (2013)) have analysed the relationship between fiscal rules and fiscal deficit and found that the fiscal deficit would be smaller in conditions where fiscal rules are strict. In one of the analyses dealing with this topic, it was concluded that the increase in the fiscal deficit is due to the lack of special fiscal rules or poor transparency of budget institutions (Alesina & Perotti, 1996).

Some analyses examine the efficiency of local public spending (Worthington & Dollery (2000), Grossman et al. (1999), Afonso & Fernandes (2006)). The analysis of public finances of the LGUs of Poland states that the budget of local self-government units is the basis of their autonomy, and is aimed at meeting the public needs of the local community (Kotarba & Kołomycew, 2014). The work dealing with the analysis of local public finances on the example of Serbia has shown that the imbalance between planned and realized budget revenues at the local level was related to a poor quality planning process, and the cause of such was also the impossibility of collecting the source revenues of local self-government units (Miladinović & Strahinjić, 2013).

The analysis of public finances of the LGUs for the Republic of Srpska have shown that the reduction of total budget revenues in local communities was not accompanied by an adequate adjustment of budget spending. The authors concluded that in most of the analysed municipalities and cities, savings on the consumption side were made at the expense of reducing expenditures for investments and maintenance, and subsidies, grants and remittances, which is the direct attack on citizens' living standards (Lenić & Martić, 2016).

When it comes to financial inequality between the local government units, the research on the example of Serbia has shown that one of the key factors is the same degree of urbanization and concentration of population, which implies that the issue of different positions of local government units could not be solved exclusively in the field of local finance. It should be placed in the broader context of balanced economic regional development (Dedeić et al. 2011). The analysis of the fiscal position in the case of the local self-government units of the Czech Republic has shown that relatively larger units of local self-government are in a better position in terms of regular settlement of their obligations (Linhartova & Nemecek, 2015).

Some analyses have shown that the key challenge for managing public finances in LGUs is their ability to regularly service their obligations and properly provide public services under their jurisdiction (Hendrick (2004), McDonald (2015)). This challenge gained additional importance in 2008, with the outbreak of the global economic crisis. During this period, municipalities faced the declining revenues,

while the demand increased in areas such as unemployment, health care, and housing (Kiewiet & McCubbins (2014); Scorsone et al. (2013)).

A part of the studies that deals with the analysis of public finances of LGUs are related to the analysis of their indebtedness. Some previous studies focusing on the analysis of local government debt for certain countries were conducted , among others, by Cropf & Wendel (1998), who investigated the example of Great Britain; Baber & Gore (2008) and Bridges (2005) who focused on American local government units, Levitas (2006) and Brnjaš et al. (2013) on the example of Serbia, and Kalcheva (2020) on the example of Bulgaria.

The results of the analysis dealing with the indebtedness of LGUs in Serbia show that at the end of the last decade LGUs entered the process of indebtedness, primarily long-term, whereby the analysis show that the debt was mostly used to finance local capital projects. Given the size of the budget of individual LGU, as well as the capital character of the projects financed by the funds provided from debts, it is concluded that this level of indebtedness of the local self-government units of Serbia can still be considered controllable. The paper states that the favourable circumstance in the borrowing of the local self-government units in Serbia is reflected in the fact that the legal framework strictly directs it to the financing of development, capital projects. In this way, in the existing conditions, LGUs are practically unable (or quite limited) to borrow for the purpose of financing current consumption (Brnjaš et al. 2013).

The study of the public finances of local self-government units conducted on the example of Bulgarian LGUs have stated that the local government units have limited resources, so that borrowing provides additional financial resources for financing investments, not relying only on current financial resources. Also, the study states that, although in most countries the local government borrowing is subject to certain rules, the main purpose of regulations limiting borrowing is to avoid reaching the excessive levels of indebtedness and financial difficulties at the local level (Kalcheva, 2020).

Another analysis on the example of Bulgaria's LGU was done to examine how a greater decentralization creates opportunities for financing municipal investments through borrowing, as well as to analyse the importance of raising funds through borrowing in terms of increasing the investment capacity. The results of the analysis have shown that the high degree of fiscal decentralization is the precondition for improved creditworthiness of municipalities (Kalcheva, 2017).

The main determinants of municipal investment capacity, according to the results of the analysis for the Organization for Economic Cooperation and Development - OECD countries, are the level of fiscal autonomy of local governments, structure and composition of budget revenues, state transfer mechanism, revenue autonomy, municipal expenditures and their structure, access to capital markets, etc. (Hulbert & Vammalle, 2014).

The analysis of the impact of the RS's external debt liabilities on the revenues of the RS's cities and municipalities has shown that, with the low LGUs participation in the structure of total external debt, some debts from external sources were made in order to invest in the infrastructure through road infrastructure projects, water supply, etc. (Lenić & Martić, 2016).

The study, dealing with the topic of LGU lending in Serbia, states that the purposefulness of borrowing should be the result of political and civic consensus, and borrowing and spending borrowed funds should be completely transparent. Also, it is particularly important that borrowing is controlled to prevent over-indebtedness, which could cause the increase in public debt and threaten the macroeconomic stability of a country (Levitas, 2006).

The research results for the LGUs of Bulgaria proved that the main risks related to the increase of municipal debt are related to the risk of additional imposition of tax burden on citizens, existence of chronic budget deficit, debt servicing to the detriment of municipal services, etc. Also, the paper states that the chronic budget deficit can occur when borrowing is inconsistent with the creditworthiness of the municipality and if the collection of own current sources of financing and current costs do not match. The analysis showed that the debt can enable the significant expansion of the municipality's investment program, but borrowing must be accompanied by realistic and long-term forecasts that take into account all risks arising from debt financing (Kalcheva, 2020).

According to the results of the analysis of LGU borrowing for Central and Eastern Europe, the main opportunities provided by municipal borrowing are expanding their investment program, achieving a fair distribution of benefits and costs between generations, reducing operating costs, promoting economic development, optimal resource allocation (Swianiewicz, 2004).

The review of previous research about the state of LGUs public finances has shown that the debt of local self-government units is most often observed, as well as the efficiency of their public spending, i.e. the budget result. However, in this paper, the subject of the analysis, in addition to the abovementioned, are outstanding liabilities transferred from the previous period, given their important role for the fiscal stability of LGUs. This analysis gained importance given the fact that the issue of fiscal stability of local self-government units in the Republic of Srpska has not been sufficiently researched.

3. Analysis of the fiscal position of local self-government units

The financial resources available to local self-government units are the feature of the country's territorial organization, the level of centralization and competencies assigned by law. In the Republic of Srpska, the local self-government is with the monotypic concept, which means that all local governments have the same competencies.

The local self-government units in the Republic of Srpska differ in demographic characteristics, the degree of urbanization, employment level, potential for generating public revenues and other general indicators. Regardless of the differences in general indicators, the legislation does not differentiate the local self-government units from the standpoint of their competencies.

Table 1: Participation of LGUs in the RS general government budget execution for 2018, in thousands of KM

	Revenues	Expendi-tures	Net expenses for non-financial assets	Surplus	Deficit	TOTAL surplus/ deficit
Budget of the RS, (fund 01)	2,783,204	2,580,236	-57,906	145,062		145,062
Central government (fund 01-05)	2,995,400	2,844,800	-178,700	145,062	-116,962	-28,100
Social security funds	769,900	715,200	-26,100	28,600		28,600
Local self-government units	684,978	533,099	-149,848	26,136	-24,105	2,031
General government sector, (fund 01)*	4,071,882	3,658,935	-233,654	203,398	-24,105	179,293
Total general government sector, (fund 01-05)*	4,284,100	3,923	-354,499	203,398	-196,505	6,200
Participation of LGUs in the RS general government sector (fund 01)	16.82 %	14.57 %	64.13%	12.85%	100%	1.13%
Participation of LGUs in the RS general government sector (fund 01-05)	15.98%	13.59%	42.27%	12.85%	12.27%	

Source: Authors' calculation based on the database of the Periodic reports on execution by accounting funds (PIF) of local self-government units and the Document of the budget framework of the Republic of Srpska for the period 2020-2022.

Note: * Adjustments made in the consolidation process are included in order to avoid double reporting of income and expenses on the same basis.

One of the preconditions for efficient performance of LGUs tasks within their competencies is the availability of the adequate level of resources, i.e. revenues, and the efficiency usage of available resources, i.e. efficient expenditure management. A local government expenditure management should ensure an efficient usage of the public funds, a fiscal discipline and an implementation of strategic priorities

The revenues of the local self-government units of the RS participate with about 16% in the total revenues of the the RS's general government sector, while that percentage in the European Union is slightly lower and amounts to 13%[3]. The share of LGUs expenditures in the RS is about 14% in the total expenditures of the general government sector. At the EU level, the average share of LGUs expenditures in the total general government expenditures is around 23%. The expenditures of LGUs in the RS have the lower share in general government expenditures compared to the share of LGUs revenues in the total revenues of the RS's general government. On the other hand, at the level of the European Union, the share of local government expenditures in the EU general government sector is higher than the share of local government revenues in the EU general government sector, which shows that there is more vertical fiscal equalization in the EU, and a higher scope of public services provided at the level of local self-government units.

In addition to the share of local government revenues and expenditures in the general government sector, the share of local government consumption in gross domestic product (GDP) can be observed as the indicator of fiscal decentralization. The analysis of this indicator is important since it shows the size of the subsector of local self-government units in relation to the total economic activity of the country. The share of the local government spending in the RS's GDP in 2018 was 6.54%, while that share for the EU countries averaged 10.6% of EU GDP. This indicates that the level of fiscal decentralization is higher in the EU in relation to the Republic of Srpska, i.e. the competencies at the local level in the EU are more numerous than is the case with the LGUs of the RS.

The realized local government surplus in 2018 makes up about 1% of the total consolidated surplus of the RS's general government sector. When all LGUs are collectively observed, the surplus was realized in 2018. Despite that, when the total deficit of LGUs, that realized the deficit in 2018, is observed, the realized LGUs deficit amounts to around 24 million KM. The amount of the LGUs deficit affects the movement of the total deficit amount, which is observed through the fiscal rules of the budget system of the Republic of Srpska as a whole.

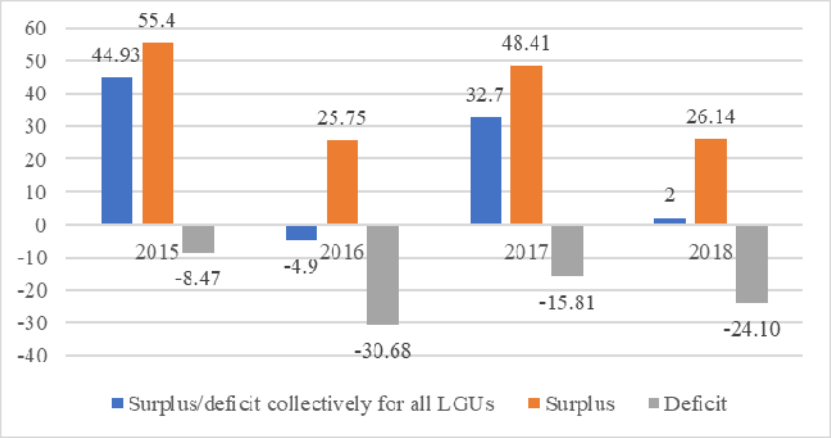
Indirectly, the growth of the local government deficit leads to a higher indebtedness and to the increase in public debt in general. The lack of budget

[3] EU member states that have the relatively low share of local government revenues in the total revenues of the general government sector are Bulgaria (with a share of about 8%), Hungary (about 7%), Romania (about 6%), and Slovakia with (about 5% share).
Source: Eurostat.https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=gov_10a_main&lang=en

revenues and receipts for non-financial assets over budget expenditures and expenditures for non-financial assets, LGUs lead to borrowing for the purpose of financing the deficit. This confirms that the debt of individual LGU increases with the accumulation of their deficit[4].

When analysing the data on the surplus / deficit of LGUs, the budget result between LGUs is the most often "broken", i.e. it is cumulatively reported whether LGU budgets are in surplus or deficit, which is basically wrong because the budget surplus of one local self-government unit cannot cover the deficit of other LGU. The deficit of local self-government units, i.e. those that had the negative budget result, in 2018 amounted to 24.11 million KM. The surplus of local self-government units, i.e. those that had the positive budget result, in 2018 amounted to 26.14 million KM. Consequently, the LGUs of the RS have the absolute and unconditional obligation to determine the way of financing the realized own deficit and the distribution of the surplus. In this way, each local government unit is responsible for its own budget result.

Graph 1: Budget surplus / deficit of LGUs, in millions of KM, in the period 2015-2018



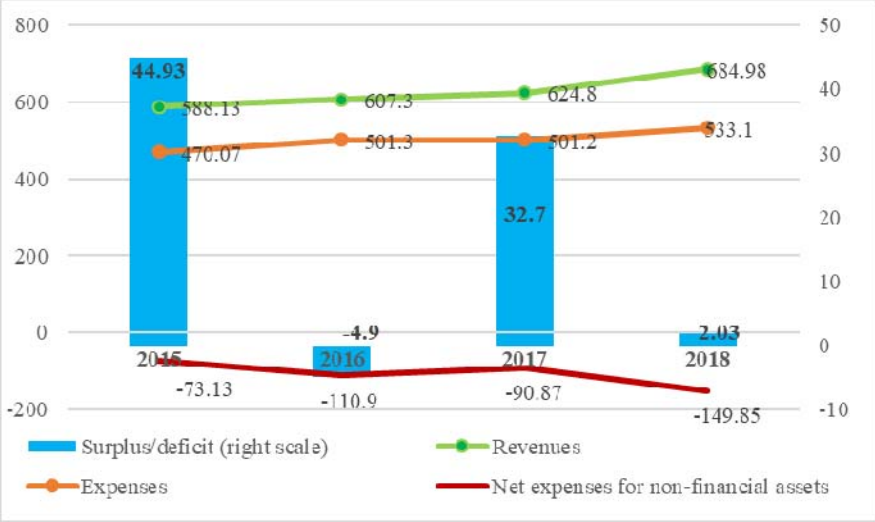
Source: Graphic presentation of the author's analysis based on periodic performance reports by accounting funds (PIF) of local self-government units, per year.

The fiscal performance of LGUs in Republic of Srpska varies significantly. About 10% of LGUs face the deficit as the long-term problem. LGUs that face the deficit as the long-term problem have the reduced capacity to finance regular activities, which results in the non-payment of due obligations. The largest number

[4] The debt of the LGUs together with the debt of other sub-sectors of the general government is subject to another fiscal rule defined by the Law on Fiscal Responsibility in the Republic of Srpska, which refers to the level of public debt of the RS.

of LGUs that have the deficit belong, according to the level of development, to the group of medium-developed LGUs. Considering that the structure of revenues of the RS's LGUs consists of the same categories of public revenues defined by the Law on Budget System, it could be concluded that the cause of the deficit of these LGUs is the inefficient public finances management.

Graph 2: Influence of trends in revenues, expenditures, receipts and expenditures for non-financial assets on the realized budget surplus/deficit in the period 2015-2018, in millions of KM



Source: Authors' graphic presentation of the analysis.

The different levels of realized surplus / deficit collectively for all LGUs in the period 2015-2018, could be explained by common tendencies in the movement of total budget revenues and expenditures of LGUs. The average annual nominal growth rate of LGUs' revenue in the period 2015-2018 is 5.26%, while the average annual growth rate of expenditure is 4.33%. In 2017, compared to 2016, there was the decrease in expenditures by 0.02%, while in 2018 there was a significant expenditures increase of 6.36% compared to the previous year. In 2018, expenditures grew at a lower rate than the revenue growth rate which amounted to 9.64%. This movement of revenues and expenditures of local self-government units contributed to the increase of the LGU surplus, and also to the reduction of the LGU deficit level in 2018 compared to 2016.

On the other hand, the movement of expenditures and receipts for non-financial assets also has the impact on the realization of the LGU budget surplus / deficit. Expenditures on the non-financial assets were the highest in 2016, while receipts on non-financial assets almost stagnated. This movement of the receipts and the

expenditures for non-financial assets of LGUs in 2016 affected the increase in negative net expenditures for non-financial assets, which resulted in the deficit increase. The analysis has shown that the most significant impact on the realized budget surplus had the savings on the expenditure side, which are, among other things, the consequence of the fiscal discipline improvement. The lower level of the LGU surplus in 2018 compared to the previous year was the consequence of the growth of expenditures for non-financial assets, but also the inefficient public expenditures management in some local government units. The inefficiency of public expenditure management in some local government units was reflected in higher expenditure growth compared to the growth of their revenues.

However, in several LGUs, the deficit in 2016 and 2018 is largely the reflection of the increase in investment spending, which could have multiple positive effects on the quality of life of the local population. In 2018, LGUs achieved the highest level of expenditures for non-financial assets in relation to other sub-sectors of the RS general government. The investment spending, i.e. net expenditures for non-financial assets of LGUs in 2018 accounted for 43% of the total net expenditures for non-financial assets of the entire budget system of the Republic of Srpska.

It is important to analyse the amount of the local government deficit in relation to their income, since the amount indicates the possibility of the LGU to finance the deficit. The deficit of LGU in relation to the realized revenues amounted to 8.06% in 2018.

When the local self-government units are observed individually, for some LGUs, the indicator of the deficit share in the realized revenues is significantly higher than the average rate. In some LGUs, the share of the deficit in their total budget revenues covers about 40%. If only the tax revenues of the LGU are observed, the share of the deficit reaches up to 80%. The analysis has shown that LGU with the high share of the deficit in its total revenues has the problem with regular settlement of liabilities. Previously stated leads to the accumulation of outstanding liabilities that will result in the indebtedness increase in the long run. In the period 2015-2018, 10% of LGUs record the chronic deficit. On the other hand, slightly over 18% of LGUs had the surplus in all years of the observed period.

To assess the ability to finance the local government deficit, beside the analysis of nominal values, it is necessary to analyse the structure of revenues and expenditures of LGUs.

Local government revenues are relatively low compared to other general government sub-sectors in the RS and account for about 16% of general government sector revenues in 2018. The share of local government tax revenues in the total local government revenues was 58.8% in 2018. In addition, LGUs are highly dependent on the revenues that are the subject of distribution, given their

high share in LGU revenues which is over 50%, when looking at the LGU subsector collectively, while this percentage is significantly higher in some municipalities. The non-tax revenues of LGU account for about 28% of total LGU revenues and almost 50% of total non-tax revenues of the general government sector. High non-tax revenues in total LGU revenue make the local community funding uncertain because the revenues on this basis are less certain. Uncertainty in the realization of non-tax revenues of LGU makes their budgeting difficult and represents the risk that the LGUs' expenditures and expenses could exceed the real possibilities for consumption in relation to the realized incomes and receipts for non-financial assets. The analysis has shown that tax revenues tend to decrease the participation rate from 63.57% to 58.8% of total revenues. The biggest impact on the decline in the share of tax revenues in the observed period had the decline in revenues from indirect taxes, as the most significant component of the local government tax revenues.

In addition to the LGU revenue structure analysis, the structure of LGU expenditures was analysed. The analysis results have shown that local governments account for about 14% of total public expenditures in 2018. The structure of LGU expenditures shows that personal income expenditures have the largest share and it amounts to 39.07%. The expenditures based on the use of goods and services participate with 25.36% in LGU expenditures.

The expenditures structure has shown that LGUs have the dominant share of the cost component, given that most funds are spent on administrative and material costs, while the development component is relatively low. Also, LGU budgets have the significant social component. The high level of social benefits in LGU budget (about 15%) is the consequence of the large number of beneficiaries and the expansion of the scope of social rights.

Financing of LGUs is the important issue for their functioning, and in this respect, the LGU debt is the unavoidable part of the analysis of the LGUs' fiscal position. It is necessary to apply the financing models that would meet the local population's needs, and provide sufficient funding sources for the providing of all public services that are within the competence of LGUs. In addition to the right to have own financial resources and resources acquired through the distribution of income, according to the Law on Local Self-Government, it has been determined that LGUs have the opportunity to borrow in accordance with the procedures and within the limits established by the law. Borrowing is one of the possibilities of LGUs to provide the missing financial funds necessary to exercise their responsibilities[5].

[5] The Law on Borrowing, Debt and Guarantees of the Republic of Srpska defines the borrowing limits for the local self-government units, which differ according to the borrowing maturity. LGUs can borrow in the long run only if in the period of debt creation the total amount due for repayment, for the proposed debt and the total overdue existing debt, in any subsequent year does not exceed 18% of the amount of

Table 2: Public debt balance as of 31.12.2018

General Government Subsector	In mil. of KM	Share in public debt, in %	As % of RS GDP[6]	As % of revenues
Republic of Srpska (budget)	3,456.3	85.36	32.36	12.80
Local self-government units	413.7	10.22	3.87	60.39
Social security funds	178.9	4.42	1.67	23.24
TOTAL	4,048.9		37.91%	

Source: Author's calculation based on data from the document of the Ministry of Finance of the Republic of Srpska: "Information on the debt as of 31.12.2018".

The LGU debt has made 10.22% of the RS public debt on 31.12.2018 or 3.87% of RS's GDP. When we look at the average share of the local government debt in the total debt of general government at the level of the European Union, it is about 7%[7], which is about three percentage points lower than the average of LGUs in RS.

Out of 64 local self-government units in the Republic of Srpska, on 31.12.2018, 57 of them are indebted, while 6 units of the local self-government have no indebtedness. The local self-government units' debt needs to be analysed in relation to the level of the realized income of the LGU. The average indebtedness of LGU accounts for slightly more than 60% of the total budget revenues of LGU in 2018, and the entire local sector could be characterized as significantly indebted. Observed individually by LGUs, slightly above 15% of LGUs have the share of debt in their realized revenues above the average rate of 60.39% revenues of all LGUs together.

The total debt of LGUs in the amount of KM 413.70 million consists of KM 115.44 million of external debt and KM 298.25 million of internal debt. The share of external debt in the structure of the total indebtedness of LGUs in 2018 was 27.90%, while the share of internal debt was 72.10%.[8]

The data on the local government debt structure by maturity show that the long-term local government debt have had the dominant share in all observed years, with the tendency to increase the share of long-term domestic debt in relation to short-term domestic debt. The Law on Borrowing, Debt and Guarantees of the Republic of Srpska allows local self-government units for short-term borrowing by only to cover temporary liquidity problems, while funds from long-term borrowing can be used primarily to finance capital investments.

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its regular income realized in the previous fiscal year. The short-term debt of local self-government units may at no time exceed 5% of the regular revenues generated in the previous fiscal year.

[6] According to the announcement of the Republic Institute of Statistics of the Republic of Srpska from November 15, 2019, gross domestic product (GDP) for 2018 was 10,679,612,000 KM.

[7]EU member states that have a relatively low share of local government debt in the total debt of the general government are Spain and Ireland, with the share of about 2%, and Cyprus about 1%. Scandinavian countries have the share of local government debt in total general government debt significantly above the EU average, which ranges from 20% (Denmark) to 40% (Norway).

[8] Data taken from the document "Information on debt as of 31.12.2018" of the Ministry of Finance of the Republic of Srpska.

Table 3: Structure of LGU internal debt by maturity, in the period 2015-2018

	2015		2016		2017		2018	
	In mil. KM	%	In mil. KM	%	In mil. KM	%	In mil. KM	%
Short-term debt	3.60	1.17	3.04	1.06	2.46	0.84	1.50	0.50
Long-term debt	303.25	98.83	282.62	98.94	291.55	99.16	296.75	99.95
Total internal debt of LGUs	306.85	100.00	285.66	100.00	294.01	100.00	298.25	100.00

Source: Ministry of Finance of the Republic of Srpska. (2019). Information on the debt as of 31.12.2018.

Borrowing through the loan agreement and issues of securities are the two main debt instruments available when it comes to obtaining financial resources through borrowing for LGUs of the RS. If the LGU internal debt is observed by borrowing instruments, most of the borrowings were realized through the loan agreement with banks (above 85%) and the rest on the RS financial market by issuing securities.

With regard to the maintaining fiscal stability, it is necessary to analyse the outstanding liabilities transferred from the previous period. As the outstanding liabilities of LGUs make up close to 1/3 of the total outstanding liabilities transferred from the previous period of the general government sector, they could be a threat to the maintaining fiscal stability of the budget system of Republic of Srpska.

Table 4: Outstanding liabilities transferred from the previous period, by RS general government subsectors

	General Government Subsector	Outstanding liabilities transferred from the previous period, balance as of 31.12.2018	Outstanding liabilities transferred from the previous period, as % of revenue in 2018
1.	Local self-government units	47,578,463	10.40
2.	Social security funds, extra budgetary	103,520,212	13.45
2.1.	Public Fund for Child Protection of RS	3,757,554	5.40
2.2.	Health Insurance Fund of RS	99,762,658	17.94
3.	RS, budget	25,677,347	0.92
4.	Total outstanding liabilities	176,776,022	

Source: Fiscal Council of the Republic of Srpska.

Outstanding liabilities transferred from the previous period of LGUs make up about 27% of the total outstanding liabilities of the RS general government sector as of 31.12.2018. This indicates that the level of outstanding liabilities is relatively high, especially when we take into account that some sub-sectors, which have significantly larger financial sources, have the low outstanding liabilities. The outstanding liabilities transferred from the previous period of the RS budget make up about 0.92% of the realized RS budget revenues, while the outstanding liabilities transferred from the previous period of LGUs make 10.40% of revenues realized in LGUs that have outstanding obligations as of 31.12.2018.

Total outstanding liabilities transferred from the previous period as of 31.12.2018 amounted to 47,578,463 KM. In relation to the level of LGUs outstanding liabilities as of 31.12.2017, the application of the Law on Fiscal Responsibility in the RS and the Rulebook on Fiscal Statements[9] has contributed to the reduction of LGU outstanding liabilities level by 9%. Out of the total number of LGUs that have had outstanding obligations transferred from the previous period as of 31.12.2018, 70% of LGUs have outstanding liabilities in the amount of up to 20% of their revenue. The analysis results have showed that the outstanding liabilities of these LGUs are fiscally sustainable, given that they have the opportunity to regularly service current liabilities, as well as to settle the outstanding liabilities transferred from the previous period.

The existence of the high level of outstanding liabilities transferred from the previous period might be the indicator of the impossibility, but also the irresponsibility of the LGU in settlement of due obligations. One of the main reasons for the creation of the high level of outstanding liabilities transferred from the previous period is the lack of income, and thus the funds to settle the transferred liabilities. LGUs with the high level of outstanding liabilities transferred from the previous period in the LGUs' total income have a problem with orderly settlement of current liabilities. The aforementioned leads to the accumulation of outstanding liabilities and in the long run poses a threat in the form of debt increase if outstanding liabilities are serviced through the loan funds.

In terms of fiscal stability, the structure of outstanding liabilities transferred from the previous period is also significant. In the structure of LGUs' outstanding liabilities transferred from the previous period, for most of the LGUs, the largest share has had material costs and expenses for personal incomes of LGUs' employees.

Depending on the fiscal position of the LGU, it is possible to define different measures for settling the outstanding liabilities transferred from the previous period. The analysis has shown that the most effective measure for settling the outstanding liabilities is savings on the expenditure side and reducing the current budget spending, especially material costs, given that they participate about 40% in the LGUs total

[9] Official Gazette of the Republic of Srpska no. 25/16.

outstanding liabilities. At the same time, it is necessary to take into account not to threaten the execution of the local self-government units' competences.

4. The impact of the accumulated deficit on the outstanding liabilities amount of the local self-government units

4.1. Methodology and data

This research analyses the fiscal stability of the local self-government units of the RS, i.e. the impact of the cumulated deficit on the level of outstanding liabilities creation on the case of LGUs.

Establishing mutual connections and relations of two or more observed phenomena is the subject of regression and correlation analysis with the main goal to quantitatively express the regular relationship of defined phenomena by equation regression analysis under the basic assumption that such a relationship exists, as well as to establish the degree and direction of their mutual connectivity. If two phenomena are observed, then the analysis is reduced to the simple regression and correlation analysis (Komić, 2000). The relationship between the movement of the LGU deficit and the LGU outstanding liabilities will be analysed using the simple linear regression analysis. For the purpose of the mentioned analysis, the LGU deficit is explanatory variable, while the LGU outstanding liabilities is a dependent variable. The mentioned relationship between the observed variables could be written in the function form as follows:

$$D = f(OL) \qquad (1)$$

In order to establish the average regular quantitative relationship between the two observed phenomena, it is necessary to determine the parameters of simple linear regression. The simple linear regression model can be written as follows:

$$Y_i = \beta_0 + \beta_1 x_i + \varepsilon_i, \quad i = 1,2,..., N \quad (2)$$

Where:

- Y_i means dependent variable, in this analysis, LGUs' outstanding liabilities,
- x_i means independent variable, in this analysis, LGUs' deficit,
- β_0 and β_1 unknown constants or regression parameters;
- ε_i is a stochastic member or a disorder;
- N is the size of the baseset.

The analysis will use the estimated simple linear regression function based on the sample, which is defined as follows:

$$\hat{Y}_i = b_0 + b_1 x_i \quad (3)$$

In the given relation, $\hat{Y}_i$ denotes the value of the dependent variable which is exactly on the best adjusted regression line, while b_0 and b_1 are the estimates of the unknown regression parameters of the basic set.

The estimates of the parameters in the regression equation are obtained on the basis of the least squares method, which implies minimizing the squares of the vertical linear deviations of the original data from the regression line. In this way, a system of normal equations for determining parameters in the regression equation is obtained (Lovrić et al. 2006). The solution of the above system of equations enables a direct calculation of parameter values in the regression equation, as follows:

$$b_1 = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - \left(\sum x\right)^2} \quad (4)$$

$$b_0 = \bar{y} - b_1 \bar{x}. \quad (5)$$

The parameter b_0 shows the expected value of the dependent variable Y, if the independent variable X has the value of zero, while the parameter b_1 shows the average change of the dependent variable with a unit increase of the independent variable.

In this analysis the econometric program Eviews will be used, by applying the least squares method. For this type of analysis, this method is considered very reliable since it mutually excludes possible errors. The analysis also contains the standard deviation, mean, maximum and minimum value, asymmetry distribution and measure of serial distribution tendency. The regression analysis provides the estimate of the significance of the following variables: probability (p), t-statistics, standard estimation error and coefficient of determination r^2. The statistical basis consists of data related to local self-government units of the RS in the period from 2015 to 2018. The relatively short time data series in the regression model is conditioned by the limited availability of relevant data.

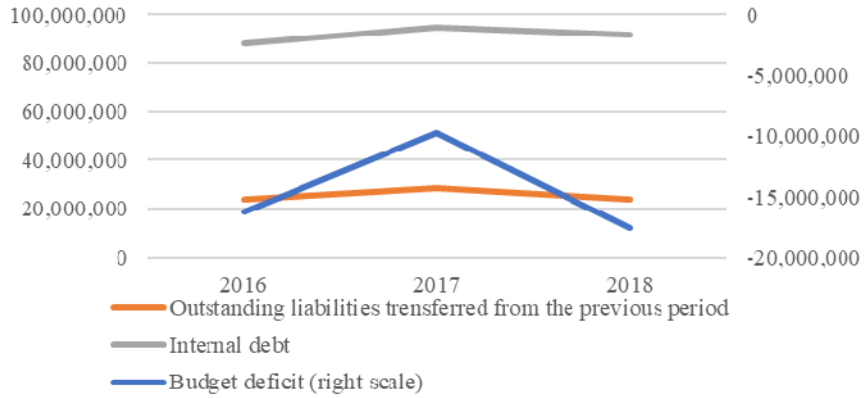
4.2. Empirical analysis of the impact of the accumulated deficit on the outstanding liabilities of the local self-government units

The basic question of this research is whether and to what extent the cumulated deficit of local self-government units affects the growth of their outstanding liabilities. The deficit growth represents the potential risk for the creation of outstanding liabilities. Although the outstanding liabilities creation is conditioned

by several factors, the accumulated deficit is the significant factor for their development and growth.

The deficit growth until 2018 was accompanied by the growth of outstanding obligations and the public debt of the local self-government units. In 2018, it is evident that there was a deficit reduction, which resulted in the slight decline in outstanding liabilities.

Graph 3. Movement of the RS LGUs' outstanding liabilities, budget deficit and debt, in KM



Source: Graphic presentation of the author's analysis.

Regression analysis has shown that there is the direct relationship between the deficit of local self-government units and their outstanding liabilities transferred from the previous period, since the correlation coefficient r is 0.48.

The regression analysis results of the local government deficit and LGUs' outstanding liabilities transferred from the previous period has shown that the coefficient of determination r^2 is 0.23, i.e. the creation of outstanding liabilities transferred from the previous period of LGUs was determined by their deficit variations with 23%. The aforementioned indicator shows that the quarter of outstanding liabilities are conditioned by the cumulated deficit.

The results of the Ftest (8.51), standard errors (0.08) and probabilities less than 1% (0.6%) confirm the significance of the LGU deficit growth rate in explaining the growth of LGU outstanding liabilities.

Regression equation Y = 5.636 + 0.25638 * Deficit shows that any increase in the deficit by one unit leads to the increase in outstanding liabilities by 0.25.

Table 5: Results of regression analysis of the cumulated local government deficit and the outstanding liabilities of LGUs

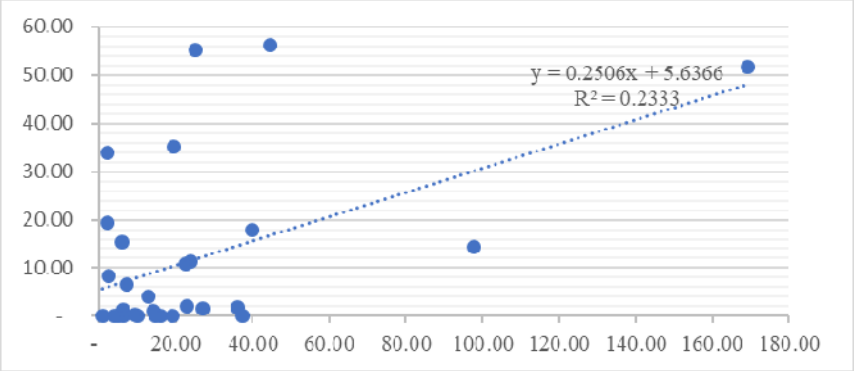
Dependent Variable: Outstanding liabilities
Method: Least Squares
Date: 06/18/20 Time: 09:36
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.636626	3.493330	1.613540	0.1178
Deficit	0.250638	0.085876	2.918622	0.0069

R-squared	0.233262	Mean dependent var	11.64183
Adjusted R-squared	0.205879	S.D. dependent var	17.35172
S.E. of regression	15.46272	Akaike info criterion	8.379081
Sum squared resid	6694.678	Schwarz criterion	8.472494
Log likelihood	-123.6862	Hannan-Quinn criter.	8.408965
F-statistic	8.518355	Durbin-Watson stat	2.097284
Prob(F-statistic)	0.006863		

Source: Author analysis using Eviews software.

Graph 4: Graph of the regression equation cumulated local government deficit and outstanding liabilities carried forward from the previous period



Source: Author's calculation.

The amount of outstanding liabilities is affected by many factors that are not inevitably determined by the deficit, such as: inadequate cash flow management, liquidity problems, mismatch of cash inflows from payments related to outflows related to payments, compensation for received obligations based on court

decisions, guarantee activation and similarly. However, of all the above, the deficit is the most significant cause of the creation of outstanding liabilities.

For the analysis of the impact of the accumulated deficit on the growth of outstanding liabilities, the analysis of the deficit impact on debt is particularly interesting, given that the realized deficit is mainly covered by new LGUs borrowing. The following table shows the results of the regression analysis, where the impact of the LGUs deficit on LGUs debt is observed.

Table 6: Results of regression analysis of cumulated local government deficit and local government debt

Dependent Variable: Debt
Method: Least Squares
Date: 06/19/20 Time: 11:06
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	43.97219	8.569109	5.131477	0.0000
Deficit	0.708606	0.210652	3.363869	0.0022

R-squared	0.287815	Mean dependent var	60.95012
Adjusted R-squared	0.262380	S.D. dependent var	44.16370
S.E. of regression	37.92992	Akaike info criterion	10.17370
Sum squared resid	40283.01	Schwarz criterion	10.26711
Log likelihood	-150.6055	Hannan-Quinn criter.	10.20358
F-statistic	11.31561	Durbin-Watson stat	1.754611
Prob(F-statistic)	0.002242		

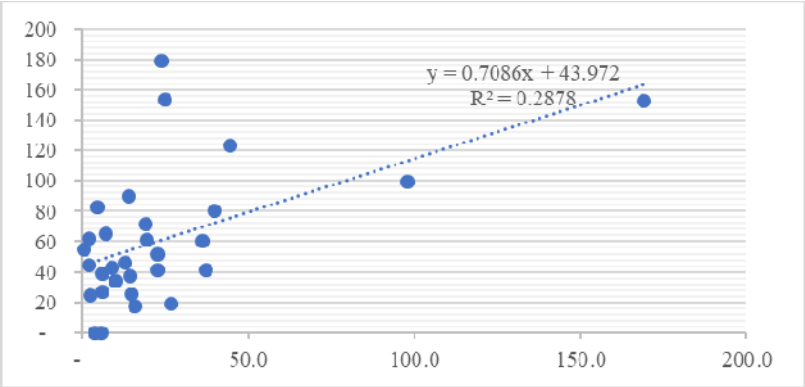
Source: Author analysis using Eviews software.

The results of the analysis show that the correlation coefficient r is 0.53, which shows that there is a significant direct link between the deficit creation and the increase in public debt of LGUs. Determination coefficient r^2 is 0.29, i.e. the increase in public debt of the local self-government units is determined by deficit variations with 29%.

Regression equation Y = 43.972 + 0.708 * Deficit shows that any increase in the deficit by one unit leads to the increase in debt by 0.7.

The previous analysis has shown that the deficit of local self-government units largely determines the growth of outstanding liabilities and /or the growth of their public debt.

Graph 5: Graph of the regression equation cumulated local government deficit and local government debt



Source: Author's calculation.

Conclusion

The Republic of Srpska has 64 local self-government units. The LGUs in the RS differ according to the potential for the generation of revenues and the revenue amount from indirect taxes. The aforementioned increases the risk of fiscal instability, which is reflected in the emergence of deficits and outstanding liabilities. The results of this paper have shown that there is a direct link between the deficit of local self-government units and the outstanding liabilities transferred from the previous period. The regression analysis results of the local government deficit and the outstanding liabilities transferred from the previous period have shown that the quarter of the outstanding liabilities transferred from the previous period are conditioned by the accumulated deficit. In addition, it has been proven that the realized deficit is mainly covered by new local government borrowing. Borrowing for the purpose of settling the outstanding liabilities represents the additional risk to the stability of public finances of the local self-government units. Accordingly, the deficit of the local self-government units largely determines the growth of outstanding liabilities and / or the growth of their public debt, which leads to the fiscal instability of the local self-government units in the Republic of Srpska. The adequate public finances management of the local self-government units determines the efficiency of their functioning.

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FISKALNA STABILNOST JEDINICA LOKALNE SAMOUPRAVE U REPUBLICI SRPSKOJ

Rezime: Fiskalna stabilnost jedinica lokalne samouprave uslov je za stabilne javne finansije Republike Srpske u cjelini. Stabilne javne finansije jedinica lokalne samouprave imaju pozitivan uticaj na privredni rast Republike Srpske. Zbog toga je neophodno značajnu pažnju posvetiti fiskalnim problemima jedinica lokalne samouprave (u daljem tekstu: JLS). Iako javne finansije JLS čine 15% od ukupnih javnih finansija Republike Srpske, važno je istaći da se život građana Republike Srpske odvija upravo u JLS. S tim u vezi, JLS imaju važnu ulogu prilikom obezbjeđenja javnih dobara i pružanja javnih usluga, kao i kreiranja ambijenta za život građana na osnovu zakonom definisanih nadležnosti. Imajući u vidu značaj i ulogu jedinica lokalne samouprave u RS, neophodno je osigurati efikasno upravljanje i stabilnost javnih finansija istih. Jedna od pretpostavki za uspješno izvršavanje nadležnosti jedinica lokalne samouprave je racionalno i efikasno korišćenje raspoloživih resursa. Cilj ovog rada je ispitivanje uticaja ključnih fiskalnih faktora jedinica lokalne samouprave na fiskalnu stabilnost istih. Rezultati ove analize daće odgovore na pitanje koliko su JLS racionalne i efikasne u izvršavanju svojih nadležnosti i kako se to odražava na njihove prihode i rashode, odnosno na ukupne javne finansije.

Ključne riječi: Republika Srpska, jedinice lokalne samouprave, fiskalna stabilnost

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